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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

CONSUMER EDUCATION PROGRAMS IN THE PUBLIC SCHOOLS

Talk by Rose Mary Bengel  
Maryland State Department of Education  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 2:45 P.M., Monday, February 16, 1970

The Vocational Education Amendments of 1968 charged home economics educators with one of the greatest challenges since the passage of the first vocational education legislation. Funds are allotted to the states for Consumer and Homemaking Programs. One-third of these funds have been designated for programs which will encourage consideration of social and cultural conditions and needs in economically depressed areas. Consumer education must be an integral part of these programs.

In today's complex society, consumer education is viewed as a universal need. Consumer education programs in the public schools can reach a majority of the population, and can therefore do much to meet this need. Consumer education programs in their many forms must help people to comprehend and cope with problems of consumption by equipping them with tools to make wise decisions and choices.

May I now briefly describe a few of the consumer education programs that are being planned and conducted in the public schools and that take new directions.

In the Philadelphia schools, a problem-solving type of consumer education program for twelfth graders evolved after an urban problems course was taught. Both parents and students were involved in that endeavor. Two other model programs are functioning now. The curriculum to be used for these programs was not written during the weekly workshops for the teachers involved. Teachers and students are developing the curriculum as they progress. The two goals they are striving toward are--the use of innovative teaching techniques and the integration of consumer problems with other subject areas such as English, math, social studies, industrial arts, and home economics. In English, for example, South Philadelphia High School worked out a unit on semantics in advertising and a drama unit in which students write and produce plays on consumer fraud. Students also produce a weekly television show on the school's closed circuit TV, entitled "Money Matters," which includes interviews, panel discussions, plays, etc.

Also interesting is the integration of consumer concepts into elementary education. In one elementary school, a mini-grocery store has been set up with





donated equipment from a food chain, which serves as a focal point for consumer education. With volunteer graduate students from Drexel aiding the program, the children produced a play on the difference between the use of money and bartering. They are now developing a thrift shop to service their school.

Prince George's County, Maryland, has in operation a pilot program involving all sixth graders from five schools. A consumer and homemaking consultant is attempting to help them deal more effectively with their environment. She is providing services to the community as well as teachers in a variety of ways. Improved self concepts and increased consumer knowledge are a pertinent part of every effort, whether in the community or the classroom.

Another project planned in Prince George's County is the development of video tapes by various teachers and the homemaking supervisory staff for use throughout the County. These will be available on loan to teachers. A Consumer Buying Series of mini lessons is in preparation. The series is to include mini lessons on (1) How to buy a used car; (2) How to buy young men's clothing; (3) Shopping for a teenager's wardrobe; (4) Buying furniture; and (5) Supermarket Shopping--meats, fruits and vegetables, and canned goods. As the project progresses other lessons will be added.

In an urban Pennsylvania school recently, student interviews to learn about consumer practices of homemakers in a Federal housing project were conducted. The results furnished information for the senior homemaking class involved. Some topics covered were impulse buying, resistance to door-to-door salesmen, cost and use of installment credit, consumer legal protection available, and planning in relation to spending and overspending.

In another high school, a team teaching approach was used. The business education teacher and the home economics teacher taught the class cooperatively as a seminar. The business teacher was primarily responsible for teaching about sources of money, loans, credit, installment buying, banking, insurance and so on. The home economics teacher and her senior girls supplemented the classes with symposiums, demonstrations, field trips, and illustrations on such topics as how to spend borrowed, saved, or earned money wisely; how to determine needs and set up priorities; how to shop by mail-order; when it pays for a married woman to work; and how to get consumer protection when needed.

A research project carried out in a rural Pennsylvania high school girls' home economics class recently was concerned with the question "Is it more economical to rent or buy a car?" The project attracted so much interest from the boys, who also became involved in gathering information, that the findings were reported in a junior-senior assembly. A panel consisting of a used car dealer, a car rental agency representative, and four students presented additional pertinent information.

Gamesmanship is being used increasingly in teaching consumer concepts. The Consumer Game, developed by Johns Hopkins University, is being used effectively in many schools. A teacher in Prince George's County developed a game she calls "shop in," which she used in a foods unit. Each girl is assigned for several weeks to bring in the mid-week food section from a



newspaper. Using these as a guide, the teacher makes up a grocery list of twenty items. The class is divided into teams and each girl is given a list from which to shop. Each team tries to complete their grocery list by buying the items at the advertised price, listing the brand names. The first team to complete the list is the winner. The team that spends the least amount is the second winner. A grand winner is a team that completes their list first with the least amount spent.

The use of television to communicate consumer concepts was well received when Baltimore City presented a sequence of 12 lessons on consumer education aimed at teenagers' needs. A similar series aimed at problems of young homemakers is being aired now.

Another approach to consumer education was introduced at the American Home Economics Association post-conference on "Innovations in Consumer Education" in Boston in 1969. Participants worked in small groups to develop home economics learning packages (HELP). These packages contain components for learner self instruction and for teacher use. A learning package is a unit in which one basic concept or idea to be learned is broken into several components or lessons. The teacher constructs the three-to-five-lesson package so that the learner may proceed at his own pace and learn in his own style by selecting from suggested alternate resource materials and activities. Built in is a pretest designed to diagnose the learner's status in relation to the concept and to help the student select materials and experiences in the area of greatest need with reference to the objective sought. The Home Economics Education Department at Pennsylvania State University has in operation on a trial basis a beginning library of HELP packages developed by graduate students, teachers, and other interested home economists. Each package has been evaluated and adapted to meet criteria suggested by subject matter and education specialists. To gain access to these packages, an individual must develop and have a package accepted into the library. The individual then becomes a member and receives five packages of his choice from a list of available packages that have been developed by others. Extension workers might want to consider developing packages aimed at the needs of individuals and groups they reach. For further information about the development of learning packages, write to:

Dr. Twyla Shear  
212 E. PC 11  
Penn State University  
University Park, Pennsylvania 16801

Relevance in consumer education means leading individuals to gain knowledge and skill needed by today's consumer and helping them to understand how their attitude and values affect their consumer decisions. The approaches and ideas mentioned above are but a few of the many being used to attain this relevance.





UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

CHANGING AGRICULTURE AND THE CHANGING OUTLOOK CONFERENCE

Talk by J. Phil Campbell  
Under Secretary of Agriculture  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 9:30 A.M., Monday, February 16, 1970

I would like first of all to welcome all of you to the Outlook Conference. The National Agricultural Outlook Conference has been a regular event at the Department of Agriculture for nearly 50 years, and I personally feel that its importance has continued to grow throughout that time.

I look back at the year 1923, when the first outlook conference was held, and I marvel at how much the agriculture we serve has changed. The Outlook Conference itself has helped produce some of the changes.

Before World War I, a farmer was relatively self-sufficient. He saved his own seed, raised his own draft animals, used manure and diversified his crops instead of buying fertilizer. He raised a lot of his own food right on the farm, because it was hard to get into town regularly.

But all in all, the early decades of the century were prosperous ones for farmers.

Then came World War I. I don't think anyone realized at first how profoundly it was to affect agriculture.

The first effect was to drain off thousands and thousands of farm workers. And at the same time farm product prices soared as industries geared up to meet wartime demands.

Suddenly, the old ways of doing things would no longer work. Farmers had to look for ways to save labor and boost their output per man-hour. They needed new techniques to increase yields. And there was a commercial market ready to pay cash for whatever farm products they could produce.

The full effects of mechanization and commercialization began to be felt after the war, when the demand for farm products dropped back to peacetime levels. There was a disastrous slump in 1919 and 1920 that cut farmers' prices almost in half.





The leadership of agriculture began to realize more and more the effects of economic forces outside agriculture on farm product supply, demand and prices.

In a very real sense, the first outlook conference was a recognition of the increasing involvement of agriculture in the non-farm economy. To make intelligent and effective adjustments, farmers would have to see prospective demands and then adjust individual production to meet the national demand.

It was an era when the American farmer was just beginning the tremendous technological changes that have revamped the face of farming. The lightweight gasoline tractor was just coming into its own. Seedsmen were working on a practical corn hybrid and the broiler chicken hadn't yet been invented. The average farm had 150 acres. It took 87 man-hours of work to produce 100 bushels of wheat.

The early outlook conferences were centered principally around the price outlook for individual commodities. This marked the first time that farmers had this type of information, and it helped greatly to put them in a competitive bargaining position with buyers and sellers.

Of course, farming in this country has changed remarkably since the year 1923.

In the years since then, output per man-hour in farming has increased 600 percent. That's amazing. The man-hours needed to produce 100 bushels of wheat have been cut from 87 to 10. The number of man-hours we invest in 100 bushels of corn have dropped from 113 to 7. We produce 100 pounds of live chickens today with about half an hour's work -- and we turn out 9 billion pounds of tender, plump broilers per year. You can get them here in our cafeteria this week, if you're interested. And while you're eating, remember that in 1923 stewing chicken was the order of the day -- and that was usually saved for Sunday dinner.

We produce 3 times as much beef now as we did then.

And we produce about a billion bushels of soybeans today, too. The soybean outlook didn't get much attention at that first Outlook Conference. We didn't produce any soybeans to speak of in 1923.

The average farm today is double the size of the farms then, and the little gasoline tractor that pulled two small plow bottoms has been replaced by machines suited to the size and type of farm, ranging up to a 100-horsepower engineering marvel with an automatic transmission that pulls 7 big plow bottoms at twice the speed.

On many farms today, machines carry water, feed the stock, clean the barn, pick fruit, herd cattle, gather the eggs and do literally thousands of other jobs. We have herbicides to weed our fields and selective pesticides to protect them from insects and diseases. Computers help us make management decisions more effectively and irrigation systems offset dry spells.



The outlook conference, too, has had to change to keep up with our technological revolution.

Outlook information is no longer released just once a year. We can collect data faster now, and farmers need more frequent reports. Now we issue Situation Reports at least quarterly on most major commodities, and statistical releases come much more frequently.

Formal reporting is only part of the outlook program, of course. Outlook information is a fundamental input to the decision-making process of government and industry as well as agriculture. Few days pass that Department outlook specialists are not called on for expert judgment by the Secretary's Office, the White House and Capitol Hill.

Agricultural organizations and agribusiness are also heavy users of this information. In fact, we've noted increasing attendance by private industry representatives at the conference in recent years.

We're happy to have you here with us today, along with your colleagues from universities and government.

The Outlook Conference program before us takes in the whole broad scope of factors that are going to have an impact on agriculture and agricultural policy in 1970 -- the economy, the international situation, rural economic development, the quality of family life, nutrition, and the quality of our environment.

With such a broad scope to the program, and the calibre of speakers and participants we have here, I think this might turn out to be one of the most significant Outlook Conferences ever.

Participants in this year's Outlook Conference illustrate the value of trained, technical people to American agriculture. From the first conference in 1923 until today we have seen vast, revolutionary changes in agriculture which have been discussed and quite often forecast at the annual conference.

We will see equally as much change in agriculture in the years ahead.

Trained professional agriculture workers in research, education, teaching, and in private enterprise have been responsible for the development of the highly efficient agriculture industry existent in America today upon which the great industrial might of this nation has been built. And American farmers have thirsted for the knowledge developed and taken to them and they are thirsting for more information and guidance today. Without today's efficient agriculture the affluency of American society would not exist as illustrated by home appliances, TVs, centrally heated and air-conditioned homes -- and automobiles, boats, and generally the high standard of living.



To you professional people at this conference, your predecessors, to your colleagues across America, and to their predecessors American society owes a great, great deal.

I welcome all of you to this conference, and I can only say that I'm happy to be able to take part in it myself.





UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

NATIONAL ECONOMIC SITUATION AND OUTLOOK

Talk by Rex F. Daly

Director, Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 10:00 A.M., Monday, February 16, 1970

As a background for our discussions this morning, I will try to outline a consensus forecast for the major components of the gross national product. Then our participants, who are well qualified to speak on monetary, fiscal and related developments will zero in on the target and tell us more precisely what they expect for the economy in 1970.

For the past several years, with few exceptions, the economy has been operating near a full employment rate with strong consumer and investment demand, big gains in personal income and inflationary increases in prices and costs. But as with most booms, this one seems to be coming to an end. A growing volume of evidence make some analysts wonder whether these cooling trends might push the economy into a deep freeze.

Quarterly gains in gross national product in real (output) terms have been smaller each quarter since mid-1968. And finally, there was no increase at all from the third to fourth quarter though prices continued to rise (figure 1).

Industrial production has been declining since mid-1969. Except for a bounce in September, housing dropped sharply throughout 1969. These cutbacks reduced employment in durable goods manufacturing industries. Total nonagricultural employment leveled though service-type activities rose further. Nevertheless, the rate of unemployment remained low through December, then rose sharply in January to 3.9 percent of the labor force. Hourly earnings also have leveled in recent months and increases in personal incomes were materially slower.

This deceleration of economic activity is largely due to monetary and fiscal efforts to cool inflationary pressures in the economy. Fiscal measures succeed in leveling the rise in Federal expenditures. Since the imposition

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I wish to recognize the advice of J. Dawson Ahalt and Meyer J. Harron on an early draft of this statement.



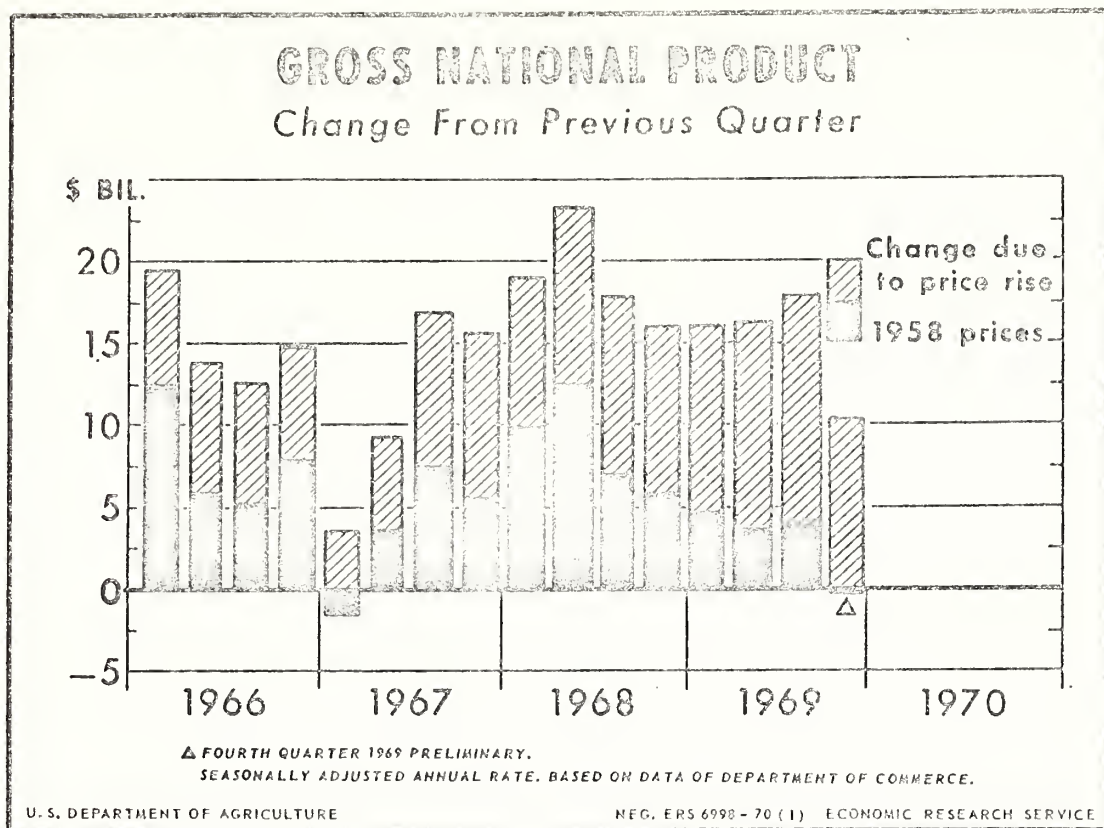


FIGURE 1

of the surtax in mid-1968, Federal revenues have increased fast enough to turn the Government account from a substantial Federal deficit in the first half of 1968 into a sizable surplus in 1969. This turnabout partially offset demand pressures on the economy. The sharp decline in home building and the reluctance of consumers to buy some big-ticket durable goods during 1969 apparently was due largely to tight money and very expensive credit.

Although monetary-fiscal efforts slowed activity in some sectors, overall demand continued to expand. The rise in business outlays for new plants and equipment quickened; expenditures by State and local governments rose; and consumers spent most of their rising incomes for services and many non-durable goods. The result was a continued inflationary rise in prices and costs during most of 1969.

As we move into 1970 the slackening pace of economic activity has become more evident and apparently has quickened. Recent trends widen the range of plausible forecasts for 1970. This will give our participants more elbow room in which to speculate about the impacts of probable developments in taxation, monetary policy, and government expenditures for defense, poverty, crime and pollution.





The standard forecast for 1970, at least the consensus in recent months, calls for:

- (1) A slowing in economic activity but no recession
- (2) A seasonal pattern with essentially no real growth in output during the first half of 1970 and a moderate pick up during the last half
- (3) Some easing of inflationary pressures on prices and costs, particularly later in the year.

Most estimates of the gross national product range from \$980 to \$990 billion. But in view of recent trends, I have leaned toward the low side and widened the "consensus range" from \$970 to \$990 billion. This is a rather wide range, but our forecast error has been this large in some years. The consensus brackets most economic forecasts made in recent months. However, the ranges are not based on anyone's specific forecast. Estimates shown for the Council of Economic Advisers (CEA) are partly approximated from the narrative in the Economic Report of the President. The "consensus forecast" (ASA) is truly a consensus of views of 57 practicing economists taken in December (table 1).

Our own forecast, which is the basis for the agricultural outlook for 1970, increases the gross national product by \$50 to \$60 billion from the \$932 billion in 1969. This puts us in good company with the Council of Economic Advisers and many others who forecast GNP in the \$980-to-\$990-billion range for 1970.

Some economic forecasts prepared in recent months exceed \$990 billion. On the other hand, a few "money supply" economists have predicted a recession. Perhaps recent trends may bring forth even more forecasts below the "consensus range" along with appeals for counter measures. Thus, this year's forecast may be uniquely uncertain because of difficulty of anticipating fiscal and monetary actions which may be considered necessary to further cool inflationary pressures and still avoid excessive reductions in demand, output and employment.

Let's now review briefly the major sources of demand in order to give you a little more detail on the forecast as well as the quarterly pattern that may emerge (figure 2).

Government purchases are scheduled to rise, but much more slowly than in recent years. The scheduled reduction in defense outlays more than offsets prospects for a small gain in nondefense expenditures. The impacts of these cuts are already being felt in defense, space and construction industries. Expenditures by State and local governments, however, will rise about as much as in 1969.

Business investment plans point to a continued but less rapid rise in fixed capital outlays through mid-1970. Forecasts of capital outlays and especially of inventory investment are the more volatile sectors of demand and perhaps the most difficult to predict. However, a slowdown now appears likely because



Table 1.--Gross National Product Forecasts for 1970  
(Billion dollars)

Item	1969	1970 Forecasts			
		Consensus range 1/		CEA 2/	ASA 3/ consensus
		Low	High		
Gross national product	932.2	970	990	985	983
Personal consumption expenditures	575.9	610	615	616	
Gross private domestic investment	139.4	131	147	144	
Non-residential	99.3	100	107	(107)	
Residential	32.2	30	33	30	
Change in inventories	7.9	1	7	(7)	5.4
Net exports	2.1	4	2	3	
Government purchases of goods and services	214.8	225	226	222	
Gross national product deflator (1958=100)	128.1	133	134	133.6	134
Gross national production 1958 dollars	727.7	729	739	737	736

1/ Consensus range includes many forecasts but is not based on any particular forecast.

2/ Council of Economic Advisers' forecast approximated from The Economic Report of the President.

3/ A consensus of 57 practicing economists, based on the American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, December 1969.



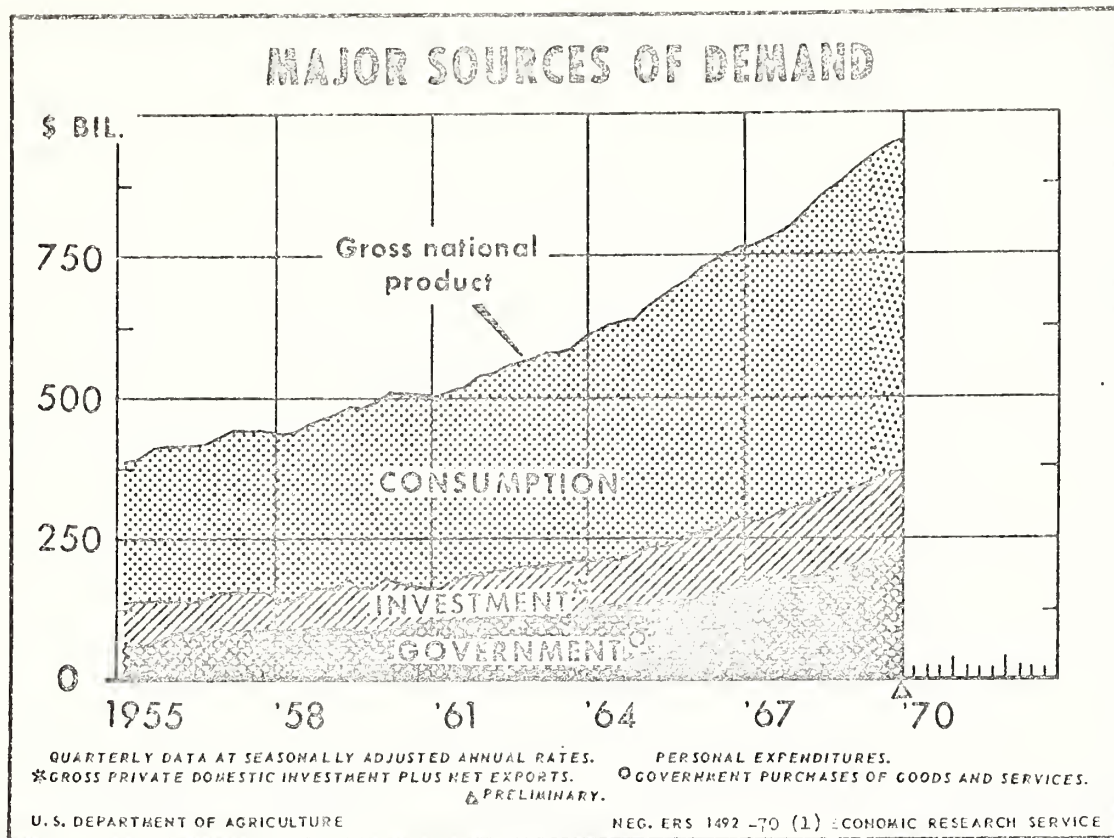


FIGURE 2

credit is expensive and scarce, plant operating rates are the lowest in years, and prospects for sales and profits are not particularly promising.

Housing starts declined during 1969, except for the jump in September. The decline was due largely to tight money which increased interest rates and made housing credit scarce. A continuation of tight money and rising construction costs will likely further curtail residential construction, despite a strong and expanding demand for housing.

Consumer expenditures will continue to rise and make sizable overall gains in 1970. But for this largest sector of demand--about 62 percent of GNP in 1969--the mix and rate of change are important. Most forecasts, even the higher ones, point to continued sluggish markets for consumer durable goods and some cutback for automobiles. But expenditures for food, other nondurable goods and services will likely continue to rise.

Consumption gains are based largely on prospects for further advances in the after-tax incomes. The incomes effect of a slower growth in economic activity, according to most forecasts, will be much more than offset by scheduled reductions in taxes and higher Social Security payments. By the last half of 1970, these adjustments may be adding \$12 or \$13 billion (annual rate) to the after-tax consumer income flow (figure 3).





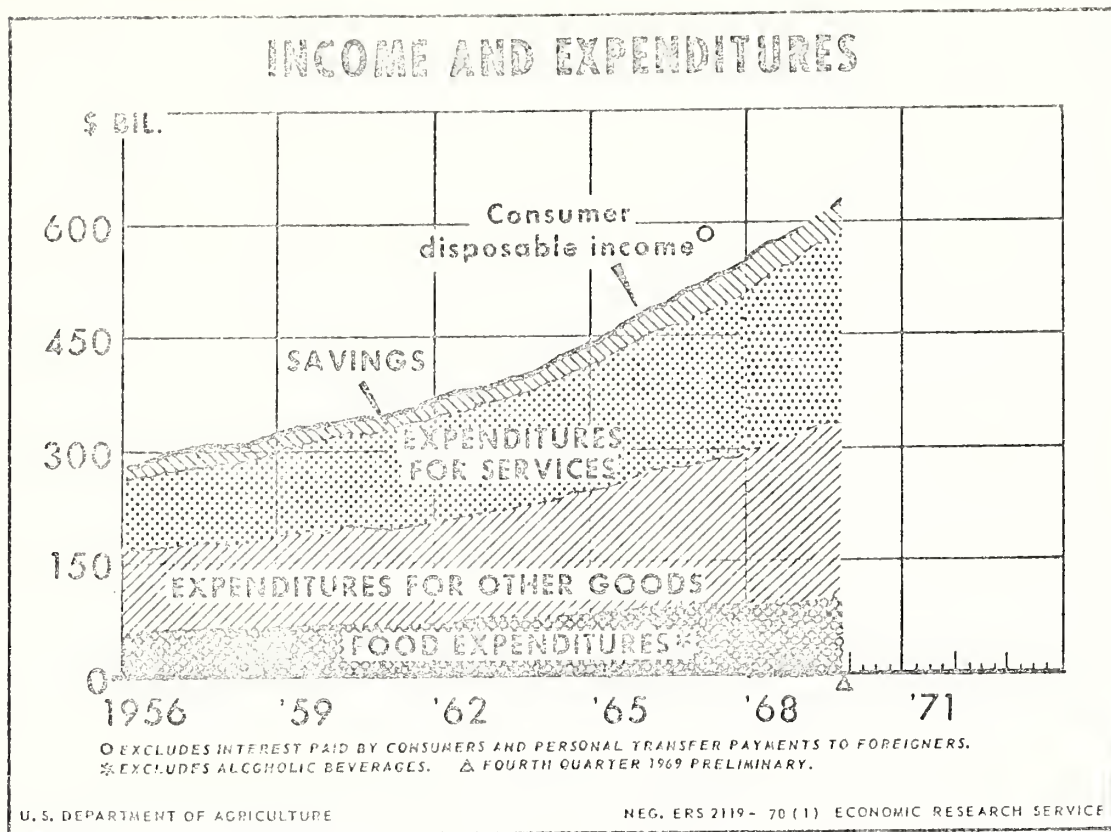


FIGURE 3

Even the higher forecasts for 1970 show only small gains in real output, especially through the first half. The lower forecasts suggest modest cutbacks from a year earlier extending perhaps beyond mid-year with practically no increase in real output for the year. All forecasts indicate some rise in unemployment. The increase is small for the high forecast, but labor hoarding and low productivity are implied. The lower forecast implies a rise in unemployment, perhaps to around 5 percent of the labor force.

Modest abatement in inflationary pressures is forecast with year-to-year price increases narrowing over the year. The lower forecast shows only a little slower rise in prices (figures 4 and 5).

Forecasts for 1970 and recent easing in economic activity move to center stage the question about what, if any, action may be needed to head off the decline. Fiscal and monetary developments as well as those relating to Vietnam and such domestic problems as poverty, crime and pollution will be important in shaping the outlook for 1970 and beyond. Our speakers and discussants are uniquely qualified to explore these issues with you and to weigh their impact on the national economic outlook for 1970.



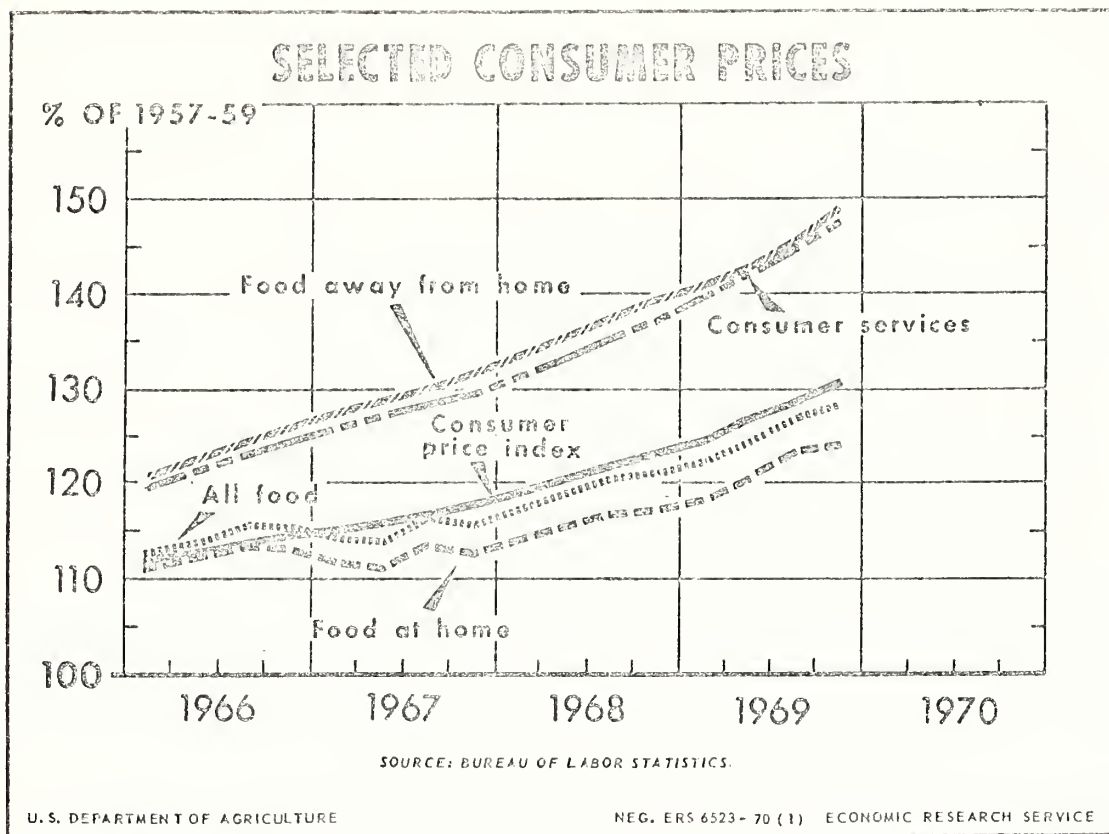


FIGURE 4

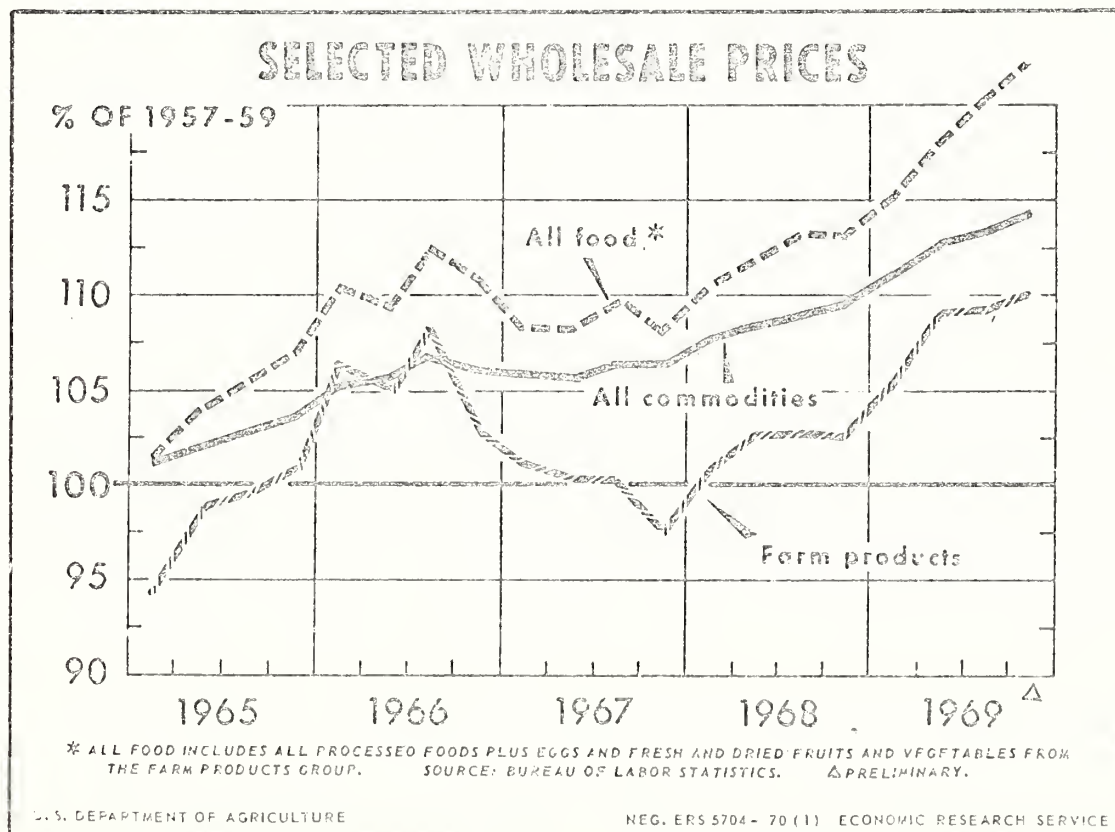


FIGURE 5





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

USING CLOSED-CIRCUIT TV FOR A CONSUMER EDUCATION PROGRAM

Talk by Elsie Fetterman  
Extension Service, University of Connecticut  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 2:45 P.M., Monday, February 16, 1970

How would you like to teach neighborhood leaders in several different locations at once in your State and never leave the campus--and the neighborhood leaders never leave home base? Add up the mileage you might save for conducting ten classes--to say nothing of repeating each of the classes seven times. In Connecticut it was close to 10,000 miles I didn't travel.

And how would you like to be able to converse freely with students in several locations at once? A student does not have to use a telephone or have a microphone passed to him at any of the locations. As soon as a question pops into his head he can ask it immediately, with an immediate response--and not necessarily from the teacher either.

In Connecticut we did this by using closed-circuit television originating from the University campus. It was two-way audio but one-way video, so the students could see me, the teacher, but I could not see them. Our extension home economists served as coordinators at the University branches located throughout the State. About 200 neighborhood leaders attended television classes in consumer credit aspects of consumer laws, including credit cards and Connecticut consumer laws: Door-to-door selling, truth in lending, garnishment, and debt pooling. The participants worked with over 15,000 families--representing over 5 percent of the welfare population.

Federal Extension Service materials on credit were used as a base for some of the classes. These included the leaflets, "What is Credit?", "Should I Use Credit?", "Credit Contracts", "Figuring the Dollar Cost of Credit", and we changed the title of "Do's and Don'ts of Using Credit" to "Wills and Won'ts of Using Credit." Other materials were developed by the Family Economics Specialist. We considered it imperative that the neighborhood leaders be given supportive materials if they were to teach others in their neighborhoods. Since we have 100,000 Spanish-speaking people in the State, all materials are available in Spanish as well as English.

I thought all of the participants in the consumer education classes were paraprofessionals from various agencies: Welfare, social service, visiting nurses, community action, legal aid, family services, human rights, and



redevelopment. I had no idea that an attorney was in the Hartford class. When a question about a legal interpretation of one of the laws came up, I asked, "Is Jim Huard at Avery Point today?" His reply was, "I'm here, but there is a Legal Aid attorney at the Hartford Branch who can answer that question."

As students were entering the class, a tune sung by Montie Montana was playing. This was one of the many resources used. The tune, called "Credit Card Blues," started like this:

If you want to get in trouble  
Let me tell you how to do it.  
Just get a credit card  
And then you're in to it.  
You can get one easy  
With hardly any strain  
Just answer some questions  
And sign your name.

So that the class members could see themselves as a total class with all 200 students assembled, an On-Campus Day was planned for the last class, with the President of the University awarding certificates of participation. Tours of the Radio-TV Center at the University were arranged so they could see themselves on television. At this class, some of the questions discussed in small groups were:

"Most of you work with agencies. Give some suggestions on how you might share this information with other members of your agency and with new incoming staff."

"How would you bring this information to the families with whom you work? Consider:

How might you reach the husband as well as the wife?  
How would you use the written leaflets?"

"If you were asked to present this information to a group of families--let's say 5 to 10 couples--how would you go about doing it?"

Some interesting "spin-offs" have developed as a result of these televised classes in consumer credit. Our editorial department arranged well in advance to have exclusive press coverage by one selected paper for each location. An executive of a company that does door-to-door selling noticed the newspaper article announcing the entire series, including the class on the Door-to-Door Selling Law. An attorney from the firm wrote a congratulatory letter. He also asked me to let him know if his firm could be of assistance--so I let him know! He came to the campus from New York and observed one session in the television studio and in one of the receiving classes on campus. Several conferences and months later the firm sent us a \$3,500 unrestricted grant for consumer education.



The University does not have branches in all the major cities of the state. Moreover, the branch in Hartford proved to be too small and scheduling too tight. Since we had one contribution from industry "under our belt," it was easier to inquire again "What are you doing?" of a company with auditoriums suitably equipped with microwave. That company contributed two additional locations.

This spring, 10 three-hour classes are scheduled--with the opportunity to have discussion among the total class of 200 and then limited to the local group. Students can reenter the statewide class at any time. A Legal Aid attorney will be present in the television studio for all classes, to render legal interpretations of consumer laws. Although all the students in the class can understand English, the Spanish-speaking participants feel more comfortable asking their questions in Spanish. A Spanish interpreter will also be present in the studio.

None of this would be possible without our Extension Home Economists on the local level carrying through--as well as cooperation with many agencies throughout the state.





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

THE FEDERAL TRADE COMMISSION AND CONSUMER EDUCATION

Talk by Jeannette Lynch  
Bureau of Deceptive Practices, Federal Trade Commission  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 2:45 p.m., Monday, February 16, 1970

As a member of the Federal Trade Commission (FTC) staff, I welcome this chance to brainstorm a little with you. As you know, the Congress has charged the FTC to protect against unfair methods of competition and to halt in interstate commerce deceptive and unfair trade practices. We will be glad to learn how we of the FTC Consumer Education-Information Staff and you who represent local professional staff, area leaders, neighborhood leaders, nutrition aides, and many other groups can complement each other's efforts.

Many of you regularly supply copy and ideas to newspapers, radio and TV stations. The FTC is eager to work out ways to provide you with current information as to actions and proposed actions of the Commission--as to consumer rights and responsibilities that stem from those actions.

Many of you are familiar with the FTC News Releases, the News Summary, and the Advertising Alert. These sorts of information are available now. We realize that FTC should package this kind of information so that it can be used more widely. The preparation of consumer-oriented releases on topical subjects is a part of the proposed expanded consumer education effort now being considered by the Commissioners.

In the meantime, are you on FTC's Consumer Protection mailing list? Being on this list will assure you of getting copies of news releases of special interest to consumers. A recent news release asks consumers to react to a proposed rule that would require manufacturers to put permanent care labels into garments. The FTC needs your ideas--and still could accept them. Hearings are scheduled for March 17 and 18.

FTC needs the ideas of professionals, of homemakers, and of young people--the gals buying permanent-pressed linens and clothes, doing two laundry loads of school clothes every morning before going to a job. Consumer comments become

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The views presented here reflect the FTC staff's position, but do not necessarily represent the views of the Commission.



consumer pressure. Homemaker organizations are in a position to exert consumer pressure--and you who are leaders of such groups can help them know what issues are under discussion. FTC and all other regulatory agencies can take steps to assure a better marketplace if consumers--individually and particularly in groups--will be vocal--write, telegraph, telephone, speak at hearings--let the consumer voices be heard. The word must get through to the decision makers! So do get on FTC's Consumer Protection mailing list. Incidentally, don't overlook the Consumer Legislative Monthly Report issued by the President's Committee on Consumer Interests, which also includes notices of up-coming hearings. Pass along the word when regulatory agencies tune in through hearings, to see that the volume of consumer voices gets turned up.

Some of you will want to receive FTC's News Summary. It will duplicate some releases you get from the Consumer Protection list, but will also contain additional information you may find helpful. You may want to get on the mailing list for Advertising Alert--especially if your programs this year include helping consumers analyze and deal with market appeals--promotion and advertising appeals. Your name will be transferred to mailing lists of whatever consumer series replace Advertising Alert and the current Consumer Protection series when FTC's expanded education information program gets underway.

More of FTC's leaflets and bulletins, also, will take on a '70 look, we hope soon. You will find consumer publications that are short, easy to read, colorful, timely yet substantive, appropriate as teaching aids. Meanwhile, the following are available:

Here is Your Federal Trade Commission  
Stop - Look - Investigate  
Fight Back! The Ungentle Art of Self Defense  
Pitfalls to Watch for in Mail Order Insurance Policies  
Unordered Merchandise - Shipper's Obligations and Consumer's Rights  
Advice for Amateurs Who Expect to Breed Chinchillas for Profit  
Advice for Persons Who are Considering an Investment in a Franchise Business  
Bargain Freezer Meats--There May be a Catch to It  
Look for that Label

These publications can be purchased through the Government Printing Office. Up to 50 copies, for educators, are available from the Washington FTC headquarters on request.

The publication on franchising has warnings you might wish to broadcast widely--pitfalls that elderly people and inner city people trying to go into business should avoid. "Bargain Freezer Meats--There May be a Catch to It" should be relevant for any of your food dollar management programs. It's a good example of educational material FTC can provide that dovetails and gives a further dimension to buying principles you might be teaching. The old freezer plan rackets seem to have given way, in some cities and rural areas, to the bait-and-switch approach to selling meat by the carcass--the side or wholesale



cuts. The Freezer Meats bulletin identifies common deceptive practices, warning signals--how to spot them in freezer meat advertisements and at the salesroom, and where to report questionable practices.

FTC's pipeline from its 11 field offices indicated an increase in complaints about some freezer meat sales practices. The pipeline from State enforcement agencies, also, seemed to point to a need for the Freezer Meats bulletin. FTC hopes that it can perfect a pipeline to you--to learn of marketplace problems of consumers. FTC hopes you will arrange, through whatever channels you find appropriate--a way to let it know what information gaps exist--what kind of substantive information would help give the complete story--how to recognize and avoid unfair practices, how to seek redress, and consumer rights and responsibilities under Truth in Lending, for example. These are topics in which FTC is especially well versed because they arise from the laws which the FTC enforces.

Won't you send me word--since you know me now. The other day I received a request for some case studies that could be used in training neighborhood aides in Connecticut, for instance. Although it is a personal opinion, since I cannot speak for the Commission, I believe the day is not far away when FTC's expanded education/information program can complement and supplement your efforts and efforts of those of other government agencies.

Let's resolve to get the most mileage possible by mixing and matching your expertise with ours, your information networks with our first-hand involvement in actions to make the marketplace more competitive and more responsive to wants and needs of consumers.





UNITED STATES DEPARTMENT OF AGRICULTURE  
Export Marketing Service

EXPORT MARKETING IN ACTION

Talk by Frank G. McKnight  
Export Marketing Service  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 2:15 P.M., Monday, February 16, 1970

It is a pleasure for me to be on this Outlook Panel, to have the occasion to meet with you, and to represent General Sales Manager Clifford Fulvermacher.

The Export Marketing Service is a new agency; thus this is the first opportunity to present its program to such a broadly representative group.

My contribution today will be limited to briefly summarizing the export marketing problem, delineating the role of EMS in meeting this problem, discussing the marketing tools we have, and giving you some idea of how these marketing tools are applied in specific situations and under changing circumstances to help private trade export commodities.

The problem is a many faceted one. Despite the danger of oversimplification, I will try to state it in a few sentences.

Facet one--The United States produces a number of agricultural crops with production in excess of its own needs. It is, for example, the world's largest producer of soybeans, corn, and cotton; and the second largest producer of wheat. Exporting is traditional. For a number of crops, the U.S. is inherently a competitive producer; for others we are priced out of the market. Although our historic system of price supports does not help to make us price competitive



in world markets, the U.S. commercial agricultural economy and marketing services are geared to the premise of maintaining current outlets.

Facet two--Despite an ever-improving world standard of living and a growing world population, consumption does not necessarily keep abreast with production. For example, to quote Assistant Secretary Palmby, ". . . the market for wheat for food has definite limitations."

Changing the consumption habits of other countries to suit the convenience of the agricultural commodities we have for sale is a long, slow, arduous process. Even our traditional markets are subject to change, and are by no means assured. People are eating less bread and more meat, using fewer natural fibers and more synthetics.

Facet three--Competing producing countries, and even producers within some of our traditional markets are pressing hard for our export customers. Our forecasters suggest that a world surplus situation will likely be with us for awhile. The governments of competitive producing countries often have direct selling authority with freedom to negotiate export prices as well as conditional terms.

Producers within marketing countries try hard, and often successfully, for Government restrictions giving them competitive advantages over imports. This is particularly significant

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in the European Common Market--the largest cash buyer. Complicated regulations restricting imports tend to proliferate.

And the posture of the United States of being the leading democratic world power has demanded that we lean over backward to support international harmony and to consider the rights and aspirations of other nations.

To restate this in even simpler terms: We must maintain our export markets. That bottomless export pit has turned out to be a limited number of specific and even restricted markets. Though competitors often get there faster with better prices and deals, world opinion demands that we do not overly exercise our marketing muscle.

Export marketing is quite popular today among U.S. agricultural economists--how nice it is to load our farm problems on a ship due to sail out of sight. Unfortunately, many other countries are enamored of the same fascinating dream.

So it is necessary to identify those possible markets--to separate fact from fiction; and it is necessary to properly assay the steps needed to turn these possibilities into solid accomplishments.

To maintain a high export level under the conditions we face is quite difficult. It requires action--considerable action--unrelenting action.





The Role of EMS

Secretary Hardin, in announcing the formation of the Export Marketing Service in February 1969, said that the purpose is to place new emphasis upon programs relating to exports of agricultural commodities, that the agency will have the principal responsibility for recommending policies and programs to maximize exports, with particular emphasis on sales for dollars. This includes privately-owned as well as CCC-owned stocks.

In the new Export Marketing Service most export sales authorities are gathered in one organization, and we are hopeful of a more unified approach to each export problem. Our organization chart reads, "formulates and administers CCC and USDA export policies and programs for the sale of agricultural commodities . . . ." We are not restricted to existing programs; but have the mandate to create such new programs as are necessary.

The climate in which we work as an agency--the basic economic and marketing situation--is beyond our control. This includes the availability and market prices of U.S. agricultural products, access to foreign markets, the competitive programs and zeal of other producing countries, and the money situation--budget and balance of payments.

Our task is that, within the framework of the existing climate, we must try to devise means of moving the optimum



amount and mix of U.S. agricultural commodities into export. This may mean positive on-the-spot effort, or it may call for devising new programs, which in turn may require new legislation. It certainly means we must know our markets and our competition.

Total U.S. agricultural exports have been trending downward in recent years. In the fiscal year ending last June 30, our exports were \$5.7 billion, as compared to \$6.3 billion in 1967-68, and \$6.8 in 1966-67. The long dock strike was a factor in last year's decline. Japan's temporary withdrawal from the U.S. wheat market was another factor. FY 1970 promises improvement. On the basis of \$3.3 billion in the first half, we should exceed \$6.0 for the fiscal year.

But exporting is getting tougher and we must adjust our efforts and our programs to suit changing situations. And we are doing this. The Department is making more commodities eligible under dollar sales programs, more competitive program regulations, examining each sale opportunity, and putting together such a program or combination of programs as seems appropriate.

Most of our agricultural exports move out for dollars, without any assisting programs. Our mandate is to increase this. But we also have a mandate to increase total agricultural exports. And we have a number of export programs designed to help U.S. agriculture do this through private commercial trade channels.



### Export Programs

Department export programs have a large and vital impact upon U.S. agricultural overseas sales. In 1968, commodities valued at about \$2½ billion--over one third of our exports--were assisted in one way or another. PL-480 represented \$1.16 billion, and Title I alone was \$0.9 billion.

Our export programs are inter-related. The usual marketing requirements of Title I agreements support U.S. commercial exports for dollars. We require that normal cash purchases be made in addition to those under PL-480. These UMR's amount to several hundred million dollars annually.

### Public Law 480

PL-480 exports play a major role. Since enactment in 1954, agricultural commodities valued at about \$18.4 billion have been financed under the program.

There are three export operations under PL-480. One is the Government-to-Government, Title I sales program. This consists of long-term credit sales for payment in dollars, or convertible local currency, and sales for local currency. Another is the Private Trade Agreement program. This provides for commodities to be delivered over extended periods and payment in dollars with credit up to 20 years. A third is the donation program under Disaster Relief, the World Food Program, and bilateral programs.





PL-480, the vehicle for the U.S. Food for Peace Program, expires in December of this year. We anticipate its extension because of many factors--the continued press of U.S. productivity despite our very large idle acreage; the limitation on export opportunity created mostly by trade barriers; and the continuing need of less developed countries for food and fiber despite substantial gains in their own production.

In addition to moving U.S. agricultural commodities in export, PL-480 is a substantial adjunct to the foreign assistance program, and thus is an increasingly important development tool. Economic improvement of less developed countries is to the advantage of the United States by fostering commercial imports of agricultural commodities.

PL-480 has adjusted to the changing needs in the U.S. and around the world. It grew to a program of exports peaking at \$1.6 billion in 1964, and comprising 30 percent of U.S. agricultural exports. As the world crop production increased, grain requirements under concessional terms decreased; legislative changes made certain Eastern European countries ineligible; and because of war and war tensions, much of the Arab world does not now participate. Thus, the program declined in volume and in percentage of U.S. agricultural export trade.



A further drop in volume results from expenditure limits placed on the program by budget considerations. PL-480 must compete for funding against the rising needs of important domestic programs. Thus, we expect PL-480 commodity exports at the level of a little over \$1 billion this year--and, we hope, in that same neighborhood next year--a level that means foreign country requests compete with one another and hard choices need to be made among them.

Concurrent with the decrease in program level is a general hardening of PL-480 terms consistent with legislative changes in recent years. Foreign currency sales are expected to be phased out by the end of 1971 except for South Vietnam. Most credit programs have some payments in dollars at time of delivery, as well as advance payments in local currencies in countries where the U.S. would otherwise purchase such currencies for dollars. Changes in ocean transportation financing policies to maximize commodity shipments under expenditure limits, require additional hard currency expenditures by recipient countries.

Although I am saying that terms are becoming progressively harder in our drive toward more commercial dollar export sales, PL-480 still provides attractive concessional arrangements to LDCs. Yet it faces increased competition



in some areas. I refer to rice being offered in the Far East by the Japanese as a result of their extremely large stocks. Japan is negotiating today with Korea an agreement to furnish 300,000 metric tons of rice. It is a 30 year agreement calling for payment in kind over a period of 20 years following a 10-year grace period. Interest is  $1\frac{1}{2}$  percent, chargeable only during the 20-year repayment period.

This illustrates that there is competition in the world even in the concessional sales area. On the other hand, we have encouraged other countries to participate in the World Food Program, and the Food Aid Convention of the International Grains Arrangement.

There is still a substantial demand for PL-480 terms in countries like India, Indonesia, Korea, and South Vietnam, as well as some South American and African countries. And there are countries like Pakistan having a pause in the "green revolution." Pakistan had announced self sufficiency in wheat, but now is importing upwards of one million tons under PL-480 because of needs in East Pakistan. In fact, total PL-480 requests exceed our ability to fund. How to reconcile these requests to resources and give equitable balance to these countries' needs has been, and will probably continue a major administrative problem.

In keeping with our push to convert to commercial dollar export sales, many countries have graduated from PL-480 programs.





The best and notable example is Japan, now the largest cash buyer of U.S. agricultural products. There are many countries in South America, Africa, and the Far East that are now principally cash purchasers of U.S. agricultural commodities, but are receiving some assistance under PL-480.

As PL-480 sales involving Government-to-Government agreements decline, we put more and more stress on programs increasing dollar sales. These programs include Barter, CCC Credit, and Commodity Export Payment programs.

#### Barter

One of the export problems we face is that programs designed to keep U.S. farm products competitive in world markets on a cash sale basis are unable to accomplish this for all markets and at all times. This is not a criticism of such programs. Factors exist in world agricultural trade that make it impossible for a general program to accomplish this--and these factors are subject to change with little or no advance notice. I have in mind such things as, special trade concessions, bilateral trading arrangements, and abrupt changes in supply and demand in particular markets.

Barter is one of the tools we can use to supplement the more general programs, by providing an incentive to increase exports on a commercial basis and by using this incentive selectively and flexibly. Our aim is not to use barter to get an unfair advantage over other exporting countries, but



to use it to retain or regain for the U.S. a fair share of export markets. To the extent barter exports increase total U.S. exports, they improve our balance of payments.

Now, I want to be clear that, when I use the word "barter," I'm not talking about traditional barter "swaps" or even tied multilateral trade. The current USDA barter program is a way of using agricultural exports to generate funds with which procurements abroad can be made for the Defense Department, the Agency for International Development, or other Federal agencies, which would otherwise spend appropriated dollars abroad. Such dollars instead are paid to Commodity Credit Corporation. The incentive I mentioned requires that CCC absorb a small differential in terms of the value of commodities to be exported over the procurement cost assumed by the barter contractor.

How do we know barter exports are all additional to what the U.S. would sell otherwise? We don't.

But we restrict the markets to which barter commodities can move and we take a calculated risk that these restrictions will give us at least some degree of "additionality."

I would like to give you several examples of recent barter operations:

1. During fiscal year 1969, U.S. exports of feed grains to Spain totaled only 169,000 tons, a decline of



84% from fiscal 1968. This year, we decided it was appropriate to use the barter program for exports of corn and sorghum to that market. From July through December corn barter exports to Spain totaled about 280,000 metric tons.

2. Cotton has been long in deep export trouble.

Early this fiscal year, we liberalized the barter export restrictions on cotton. We have succeeded in committing about 350,000 bales for export under barter contracts through the first seven months of the fiscal year.

During the first half of FY 1970, new commitments under barter reached \$232.2 million. This was the highest six-month total in the 20-year history of the program. We expect barter exports to approach \$400 million for the year. The previous high was \$400.5 million, achieved in fiscal 1957.

The commodities currently eligible for barter are wheat, feed grains, tobacco, cotton, rice, cottonseed and soybean oils, and inedible tallow and grease.

CCC Credit Sales Program

The CCC Credit Sales program--sometimes called the GSM-4 program--is an important assisting operation to cash export sales, offering:

1. Short term credit financing--an essential step in any sale, and





## 2. Interest rates competitive in the market place

It is a commercial-type short-term credit program which began in 1956. Transactions are between U.S. exporters and foreign importers--never government-to-government. It was originally developed to reduce then large CCC inventories.

Current GSM-4 regulations specify that any agricultural commodity can be given consideration for eligibility, so long as credit is needed to meet competition and will result in greater total dollar export sales.

The program has moved \$1.3 billion worth of commodities since it began, an average annual rate of about \$100 million.

Recent changes include lengthening the usual credit period from 6 months to 12 months on all commodities, allowing a maximum of 36 months where justified, and increasing the number of eligible commodities. With these changes, we now anticipate about \$175 million credit sales in FY 1970.

All financing is on an f.o.b. basis, and a letter of credit from an acceptable foreign or U.S. bank, assuring payment, is required. Foreign bank letters of credit must be guaranteed by a U.S. bank, which endorses not less than 10 percent of the commercial risk. Where a U.S. bank issues the letter of credit, it is liable for both commercial and political risks.

CCC credit sales are not subject to Cargo Preference Legislation, and may count against usual marketing requirements



of PL-480 agreements.

The use of CCC credit for wheat in the Philippines is an example of how the program can be used to help us maintain our share of a market. For the past several years, 90 percent or so of the wheat import requirements of the Philippines was supplied by the U.S. This year competing wheat exporters are offering terms and conditions that would tend to almost eliminate the U.S. from this commercial market were it not for the availability of CCC credit. This program permits U.S. exporters to offer wheat to the Philippine market for a 3-year credit period. We hope this will meet competition so that we can maintain a substantial part of the market:

Getting closer to home, CCC credit is enabling us to export corn to Mexico this year. Because of poor crop conditions, Mexico is finding it necessary to import corn in contrast to its usual position as an exporter. Mexico is getting corn from other countries but CCC credit is helping U.S. exporters to participate in this market in a fairly substantial way.

#### The Export Payment Program

I have talked about across-the-board programs. We have in the export payment program a vehicle for singling out specific commodities for assistance.

As an example, the wheat export payment program began in 1949. It was originally a cash export payment. In 1956,



a growing wheat surplus initiated a change to payment-in-kind, or the issuance of a PIK certificate, which was redeemable from CCC in surplus commodities. In 1966, when wheat surpluses had been reduced, cash payments were reinstated.

The purpose of the program is to enable U.S. exporters to offer U.S. wheat in world markets at competitive prices. Frankly, we look forward to the day when such payments are unnecessary.

Each business day at 3:30 p.m., we announce the export payment rates applicable to the various classes of wheat for export from the several coasts, as well as the type of sale and eligible destinations for each rate.

We also offer an export payment rate for flour.

The rice export payment program has the same goal as that of wheat. The rice subsidy committee meets weekly and recommends appropriate export payments.

Ultimately all export effort winnows down consideration of problems concerning specific commodities. It is essential that we keep up with the situation on these commodities throughout the world as well as in our daily domestic markets. We lean heavily on our sister agencies for contributions to our situation examinations.

In cotton, for example, we find world production anticipated to be about a million bales short of world consumption,



yet world trade is expected to be about 17 million bales--down 0.3 million.

Cotton faces tough competition in the expanding use of man-made fibers, thus world consumption is relatively static at about 53 million bales. The United States has a difficult time sharing in available markets, as foreign producers often offer the more desirable hand-picked and roller-ginned cotton, as well as keen price competition. And, for a few countries, sales are missed because of current inadequate supplies of low priced shorter staple cotton.

This marketing season our cotton exports are running about 70 percent of the previous season. To improve this situation we are using our programs to a greater extent. For FY 1970, we estimate that 63 percent of our projected total cotton exports of 2½ million bales will be assisted by one or more of our programs. This compares with 51 percent last year.

We attempt to more swiftly take such action as is necessary to hold our export sales volume. For example, EMS was instrumental in recognizing the decline in commercial grain sorghum sales to Japan and, in a coordinated effort with ASCS, made limited supplies of CCC sorghum available at a time when the commercial supply could not respond to the need.

Grain storage space is very tight in the upper midwest. EMS is considering its disposal operations with an eye to making room for the 1970 harvest.





### Private Trade Long-Term Credit

There is one more program, Private Trade Long-Term Credit, that illustrates our push to sell for dollars and to orient trade toward private commercial transactions. It is not a large program but it is a step in the right direction.

This program attempts to be competitive price and credit wise, and it also seeks to encourage long term trade by encouraging construction of facilities for storage, and processing of agricultural commodities normally exported by the United States. It is hoped this program will stimulate private economic enterprise in recipient foreign countries.

For example, Iran was one of our better customers for edible vegetable oils. Low Russian prices caused a drastic decline, almost eliminating our exports to Iran in the period 1966-68. Under a mutually beneficial private trade agreement we moved 18,000 M/T of vegetable oil in mid-1969. An additional 64,000 M/T of commercial sales were made for export October 1969 to July 1970, most with the aid of CCC Credit or Barter. Under the above private trade agreement, 42,000 M/T of vegetable oils are scheduled for export to Iran in the balance of this calendar year.

### Operational Problems

Many people are unaware of the large number of associated problems involved in exporting. The task is not finished when the sale documents are signed. In addition to the price, the credit, the quantities and quality of the commodities, there is



the problem of location of those commodities, moving them to the most suitable port, marine transportation, and unloading them into suitable storage facilities. Time is an important dimension in a sale.

To assist U.S. exporters, USDA must become involved in ocean transportation problems. We have a division that operates in this complicated field. It assists the trade in solving movement problems and it works to achieve competitive freight rates. One arduous task is to get the exporter and the shipping industry to understand each others problems--to prevent aggravation of already difficult situations.

We recently assisted in arranging shipment of over 100,000 cases of apples to Venezuela, regaining a lost market. The solution was not only lower freight rates, but assistance on the part of the exporters in delivering commodities to the carriers in such a way as to permit savings passed on in the form of lower freight rates.

Again we were able to obtain better rates on hides to Japan, assuring continued movement to that important market.

Packaging and containerization improvements are under joint exporter-carrier-USDA study and discussion.

In conclusion, I have tried to give you some idea of the problems involved in export marketing, to state the mandate and working authorities of the Export Marketing Service, and



how we use them to assist private commercial trade in moving our commodities.

I hope that you have been able to get a picture of export marketing in action.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

REMARKS OF THE HONORABLE MURRAY L. WEIDENBAUM  
ASSISTANT SECRETARY OF THE TREASURY FOR ECONOMIC POLICY  
BEFORE THE NATIONAL AGRICULTURAL OUTLOOK CONFERENCE  
WASHINGTON, D. C.  
MONDAY, FEBRUARY 16, 1970, 10:00 A.M., EST

CHANGING PRIORITIES FOR THE 1970'S

President Nixon's new budget for the fiscal year 1971 is a clear and specific indicator of the Administration's determination to maintain a noninflationary fiscal policy for the year ahead. But the new budget is more than that; it also is a major step toward rearranging our national priorities for the decade of the Seventies. I would like to explain both of these points this morning.

The Fiscal Outlook for 1970-71

From the viewpoint of short-term economic stabilization, the thrust of the fiscal year 1971 budget is quite clear. To the \$3.2 billion surplus achieved in fiscal 1969 and to the \$1.5 billion surplus we anticipate in the current fiscal year, it is our determination to add a third year of modest excess of income over governmental outgo -- a 1971 surplus of \$1.3 billion.

Given the economic environment that we anticipate, I believe that such modest budget surpluses are the order of the day. The maintenance of a budget surplus is a clear signal to the money markets, private investors, and other



sectors of the economy that the Federal Government is continuing to press its anti-inflationary effort. I believe that any planned deficit, no matter how small, would have weakened that impact. In contrast, too large an anticipated surplus could set in motion strong deflationary forces. It also is noteworthy that these surpluses are being achieved by restraining public sector demand, rather than through new or increased taxes.

The budget has been prepared on the basis of a set of economic assumptions for 1970 which we consider quite reasonable. Actually, our estimates of GNP (\$985 billion), personal income (\$800 billion), and corporate profits (\$89 billion) are all close to the midpoint of the range of forecasts made by experienced private economists and financial analysts.

We have projected the Gross National Product in the calendar year 1970 at a five and a half percent increase over 1969. This clearly represents an intent to achieve a temporary slowdown in the growth pattern of the economy for 1970, a slowdown necessary to achieve a substantial reduction in inflationary pressures before the economy returns to high employment growth at relatively stable prices.

No official quarterly pattern of GNP in 1970 has been released. Obviously, more than one such pattern would be consistent with the \$985 billion figure. The pattern that



I personally prefer shows real GNP relatively flat in the first half of the year, followed by an upturn in the second half. As you may know, one of the favorite new parlor games in Washington, at least among economists, is to debate the significance of the fraction of one percent decline in the real GNP in the fourth quarter of 1969. It is hard for me to view this as any thunderous or precipitous decline. In fact -- as I said in a public statement three months ago -- I do not measure major swings in economic activity by such fine percentages. That is, a decrease of several tenths of one percent in the real Gross National Product really means a period of no growth. I would make the same statement about a reported rise of several tenths of one percent in real GNP.

Incidentally, despite a lot of third party statements to the contrary, the Treasury economics staff has not been able to discover any pronouncement by the National Bureau of Economic Research that it mechanically measures a recession by two or more quarters of negative real growth, no matter how small, in the GNP or in any other single statistical series. The Bureau uses three broad criteria in characterizing a phase of a business cycle: (1) its duration, (2) its amplitude of change, and (3) its scope or degree of involvement among economic sectors.

Looking beyond the outlook for the coming year, I believe that it is particularly significant that this year's Federal Budget, as well as the Economic Report, contains projections beyond the budget year, through the period ending in 1975.



This Administration believes that such a forward look is necessary for more informed and enlightened decisions on national priorities.

### Changing Federal Priorities

The Federal Budget for 1971 provides a good guide as to the changing priorities of the Federal Government. Rather than repeating the rhetoric usually contained in such documents (thankfully, this year it is kept to a minimum), let us see where the money is going.

Last year, as in every year since the Korean War, the largest category in the Federal Budget was national defense. In the 1971 budget, in contrast, the largest share of the budget goes to a civilian sector, specifically to human resource programs (which includes education, health, welfare, veterans, and manpower projects). The shift is quite dramatic -- in 1969, 44 percent of the budget went to defense and 34 percent to human resources; in 1971, we come close to reversing the relationship -- 41 percent to these civilian investments in people and 37 percent to military programs.

Only in part does this shift represent our winding down of our direct participation in the Vietnam War. The trend we are reversing is a longer-term trend than that. A decade ago, in 1961, national defense received a larger share (48 percent) of the Federal Budget than is either contemplated for 1971 or actually was spent in 1969.





The anticipated \$7.7 billion reduction in military outlays between 1969 and 1971 is the largest area of cutback, but by no means the only one. Space exploration spending is down by over \$800 million in the same period, and foreign aid is about \$200 million lower.

Other reductions or eliminations occur in lower priority areas throughout the budget. The President proposes to eliminate the operation of the nuclear ship Savannah, to close down the NASA Electronics Research Center, to sell the Alaska Railroad to private owners, to sell off over \$750 million worth of surplus commodities from our stockpile of strategic and critical materials, and so forth.

The areas of increase and, hence of higher priority, in addition to human resource programs previously mentioned, are quite noteworthy. Programs to improve the environment, such as control of air and water pollution and more parks and open spaces, expand by over 50 percent in two years, rising from \$785 million in 1969 to a recommended \$1.1 billion in 1971. The 1971 figure represents a more than fivefold increase from a decade ago.

Outlays for crime reduction also represent an area of substantial growth in the Federal Budget and, hence, of increased priority. Expenditures in this area almost double in a two-year period, rising from \$658 million in 1969 to \$1.3 billion in 1971.



Another important, but less dramatic change in the Federal sector is the trend toward decentralizing the actual operation of public programs. This can be seen most clearly when we examine two separate but related items -- (1) the personnel of Federal agencies and (2) financial assistance to state and local governments.

The 1971 budget proposes to continue the reduction in direct Federal employment begun last year. From a total of 2,633,762 full-time permanent civilian employees in the Executive Branch as of June 1969, we now estimate that the total will be 2,602,800 at the end of June 1970, and down to 2,597,200 by June 1971.

In contrast, Federal financial aid to state and local governments will be rising during this same period, to help our states, cities, and counties to carry out programs of national significance.

The estimated total of \$28 billion of Federal aid to state and local governments in 1971 is an almost fourfold increase since 1961. Moreover, the 1971 funding represents more than an increase in dollars. It contains what we believe to be an important qualitative innovation in Federal-state-local fiscal relations. What I have in mind here is a start on our new program of Federal revenue sharing with state and local governments.



We are well aware of the adverse side-effects that too often accompany existing programs of grants-in-aid. Revenue sharing, which will be in addition to existing grant programs, is designed to decentralize not only the expenditure of Federal funds but the actual decision-making as to the way the funds will be spent. Our revenue-sharing program provides for priorities to be set by each state and local government, rather than here in Washington.

Let me emphasize that these shifts in priorities have not come about the easy way, by merely realigning expenditures in a rapidly expanding budget. Rather, this Administration has taken the more difficult but, we earnestly believe, the more responsible and necessary approach of rearranging relative program priorities within an almost constant budget total. Specifically, during the years 1969-71, total budget outlays are estimated to increase about 2 percent a year, or less than the near-term expected rise in the price level. This overall restraint in government spending is necessary in reconciling our two-fold considerations of promoting short-term economic stabilization and long-term growth and welfare.

Let me end by noting the positive outcome we expect from the responsible pursuit of both objectives. Our short-term effort of fiscal restraint should, as we see it, make possible a long-term sustained period of substantial growth of income,





employment, and living standards. On the basis of our projection of a \$1.4 trillion GNP in 1975, the current Federal tax structure would yield \$266 billion in revenues in that year. Even after making full allowance for the future costs of current programs plus the new efforts recommended by the President, we estimate that there will be an additional \$22 billion available to finance new program initiatives in 1975. Those are the rather pleasant prospects of an enlightened and responsible fiscal policy. It may not suffice for all that we may wish to do, but it provides the opportunity for a good start.

#### Summary

These, then, are the economic highlights of the Federal fiscal outlook:

1. The maintenance of budget surpluses in the fiscal years 1969, 1970, and 1971 is a clear signal to the money markets, private investors, and other sectors of the economy that the Administration is continuing to press the anti-inflation effort.

2. I do not measure major swings in economic activity by such fine percentages as a fraction of one percent of GNP. On this basis, I expect real GNP to be relatively flat in the first half of 1970, followed by an upturn in the second half.

3. The 1971 budget signals a fundamental reorientation in the composition of the Federal Budget -- from military to



civilian programs. The largest single share -- 41 percent -- is devoted to investments in human resources, up from 34 percent in 1969 and 30 percent in 1961.

4. In striking contrast, the military portion of Federal outlays is being reduced from 44 percent in 1969 (48 percent in 1961) to 37 percent in 1971. The role of the military in our society as a whole and in the public sector specifically is being reduced substantially.

5. In addition to human resources (such as education, health, welfare), other areas of high priority and hence of rapid Federal expenditure increases are improving the environment -- up over 50 percent between 1969 and 1971 -- and crime reduction -- a twofold increase during the same period.

6. Another important change is the trend toward decentralization of the Federal sector. This can best be seen by the modest reductions in direct Federal employment and the substantial expansion in Federal financial assistance to state and local governments (e.g., revenue sharing).

7. These shifts in priorities have not come about the easy way, by merely realigning expenditures in a rapidly expanding budget. Rather, we have taken the more difficult but necessary approach of rearranging relative program priorities within an almost constant budget total.



8. To assist the Nation in setting future priorities, the 1971 budget makes the important departure of including long-term projections. On the basis of a \$1.4 trillion economy in 1975, Federal revenue from existing taxes would be \$266 billion. This would be \$22 billion above the 1975 costs of existing programs plus Nixon Administration initiatives to date. This is not a forecast of any \$22 billion surplus, but an indication of the long-term flexibility that can result from sensible short-term fiscal policies.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Foreign Economic Development Service

THE DEVELOPING COUNTRIES AND U.S. AGRICULTURAL TRADE

Talk by Quentin M. West

Administrator, Foreign Economic Development Service  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 3:30 P.M., Monday, February 16, 1970

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The role of the developing nations in international trade has recently taken on a new complexion. A few years ago there was concern that the less developed countries (LDC's) were losing the ability to feed themselves, and that massive food aid would be needed. Today, there is a feeling that perhaps the LDC's will, after all, be able to feed themselves for a while and that smaller quantities of food imports will be required. American grain farmers were willing to produce to feed the world. Now that this may be less necessary, they are concerned about the loss of export markets.

These are, however, but the surface manifestations of a number of complex developments. Just how much have advances in agriculture in the LDC's affected the market for U. S. agricultural products? How much have U. S. exports been influenced by other factors - by changes in P.L. 480 food aid policy, production in the developed countries (DC's), better weather in the developing nations, trade restrictions in the developed countries, the dock strike, the closing of the Suez Canal?

These are some of the relationships we must clarify to get a good view of the recent development and trade process. We must, I believe, understand this process in order to make rational decisions regarding our interests in world trade and our responsibilities toward LDC agricultural development. By agricultural development, I do not mean simply self-sufficiency. I mean, rather, the expansion of agricultural production and the improvement of marketing so that: (1) the country is freed from the chronic need for concessional food imports; (2) more persons are better fed, and (3) agriculture makes a positive contribution to overall economic development.

CHANGES IN AGRICULTURAL PRODUCTION

Those projecting a new role for the developing nations in world trade assume significant increases in LDC agricultural production. The record shows that the pattern of production successes is far from even in the developing world.





## Production Indexes 1/

Total production in the developed and the less developed world increased at about the same rate from 1960 to 1968 (see Figure 1). In 1969, LDC production continued up and production in the developed nations declined. On a per capita basis, the story is quite different: while developed country production increased over the 1960 to 1968 period, LDC production, because of population growth, did not increase. In fact, it declined from 1963 to 1966, and in the last three years has only regained the level of the early 1960's. Over the previous two decades, LDC per capita production increased only about 1/3 of 1 percent per year.

Production changes in the developing world have varied considerably by region (see Figure 2). Since 1963, there has been an increase in per capita production in East Asia and a more gradual increase in West Asia (to an index of 103, not shown in Figure 2); a decrease in Africa; and little overall trend in Latin America and South Asia. South Asia (Ceylon, India and Pakistan) experienced a sharp drop in 1965 and 1966 which led to widespread concern that the world would run out of food. The recovery in the same area over the last three years has led to corresponding optimism about the world food situation. The "green revolution" figured in the increase in output of East Asia and the recovery in South Asia.

## Examples of Development:

There has been, perhaps, too much publicity about the "green revolution." It is quite clear from actual production indices that no output revolutions have occurred, in per capita terms, in Latin America, Africa, and West Asia.

But, the rice and wheat story in South and East Asia cannot be denied. The area planted to high-yielding varieties of wheat and rice in South Asia jumped from essentially nothing in the early 1960's to 23.7 million acres during the 1968/69 season (16.0 million of wheat and 7.7 million of rice). East Asia's area planted to IRRI-type rice increased to 3.7 million acres during 1968/69 (principally in the Philippines). 2/

The result of these new varieties, accompanied by improved cultural practices, has been a substantial boost in grain production. So far, this increased output has largely replaced concessional imports. It is doubtful that overall

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1/ The indexes reported in this section were prepared by the Foreign Regional Analysis Division, ERS. The LDC's, as defined in compiling these indexes, are: Asia excluding Communist Asia and Japan; Africa excluding the Republic of South Africa; and Latin American Republic excluding Cuba.

2/ Dana G. Dalrymple, Imports and Plantings of High-Yielding Varieties of Wheat and Rice, U. S. Department of Agriculture, Foreign Agricultural Service, November 1969, pp. 24-25.



FIGURE 1

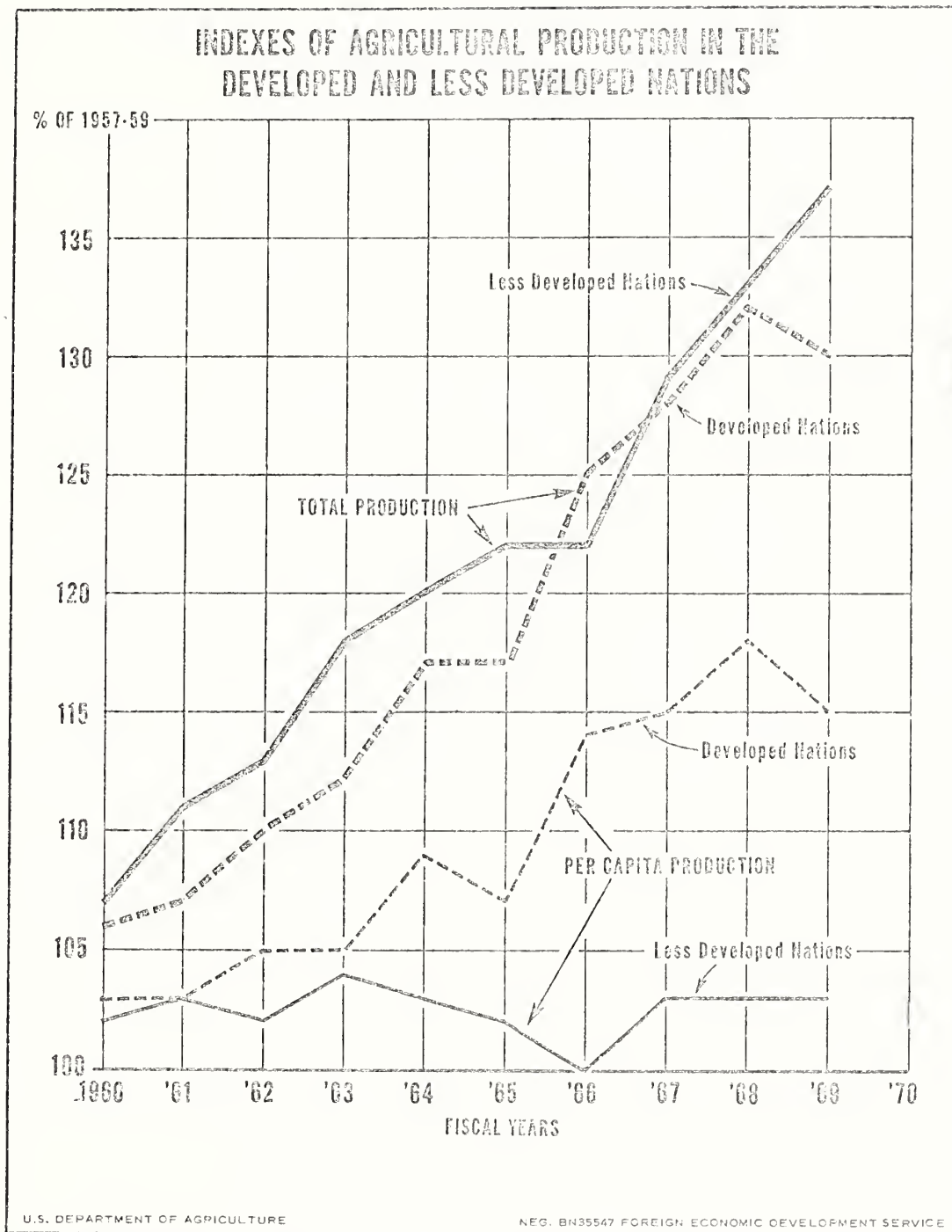
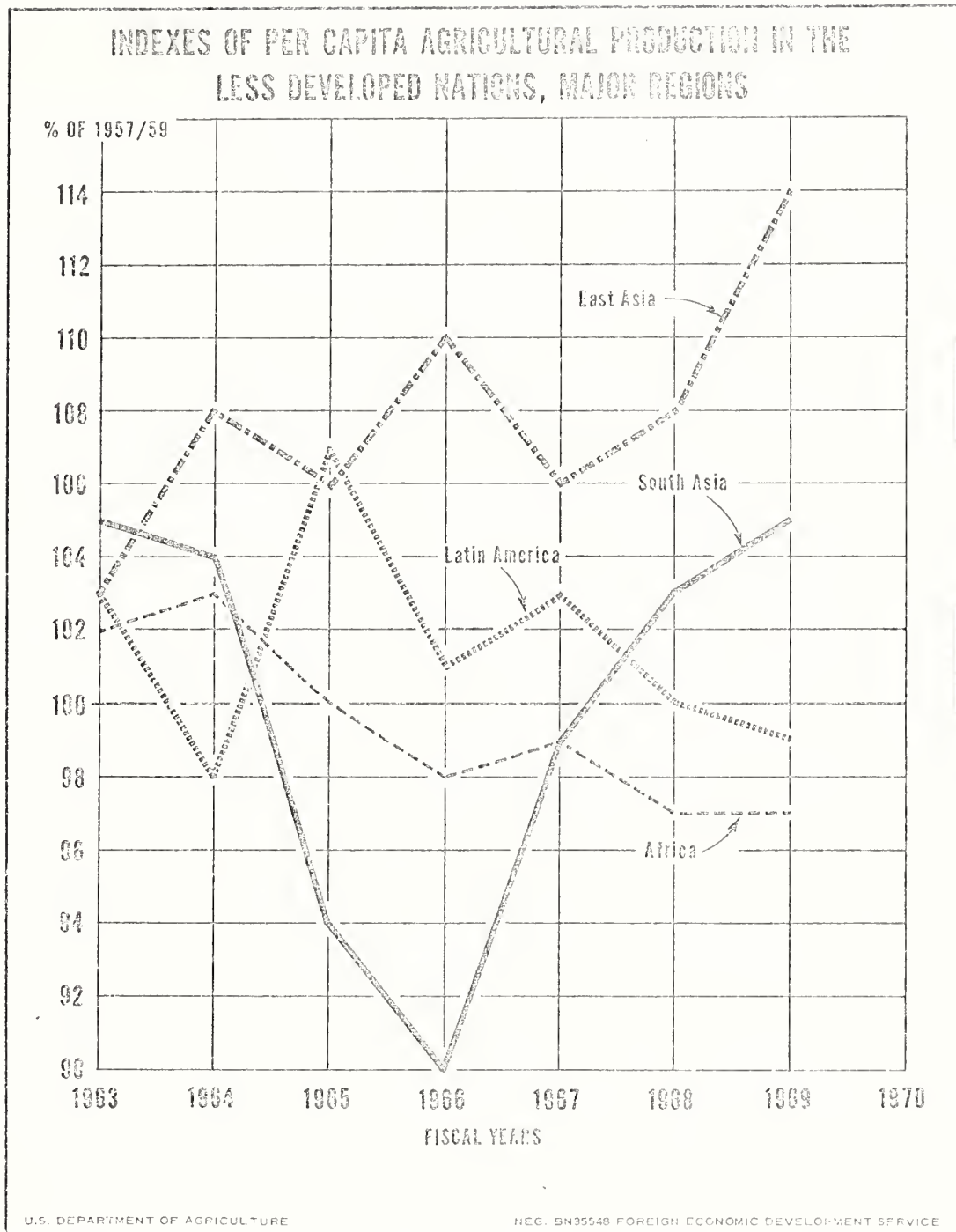




FIGURE 2





nutrition has yet been significantly improved (in some cases wheat and rice have replaced production of higher protein crops). And it is not yet clear whether this agricultural growth has had much impact on national economic growth.

There are also other advances in East Asia. Taiwan is developing a highly productive and diversified agriculture and is now competing on international markets in some commodities. Thailand has also diversified its agriculture and is an important exporter of corn and pineapple.

There have been fewer advances in Africa and Latin America. Countries there did not face the critical food situation threatening Asia a few years ago; so there has not been as much concern for agricultural development. Africa has some promising projects---corn in Kenya, wheat in Morocco and Tunisia, and rice in Senegal---but these are small in scope.

Asia has seen some revolutionary crop changes. But, most of the less developed world remains untouched.

### CHANGES IN U. S. AGRICULTURAL TRADE 3/

As we explore the character of our U. S. agricultural trade -- our exports, our imports, and the fierce competition we now face in the international grain markets -- we find the developing countries and their "green revolution" are not the heavies they might be considered. We find, instead, just a return to a more "normal" concessional export situation and an actual increase in commercial sales with the LDC's. Our stiffest competition comes from our well-developed neighbors. And, interestingly, we find we depend upon the developing nations more than some may have thought for the bulk of our needed complementary imports. Such dependence should influence our views on LDC efforts to produce more abundantly and more efficiently.

#### U. S. Exports

From 1955 to 1967, commercial exports climbed while concessional sales, under P.L. 480, held about steady (see Figure 3). Total exports fell from \$6.7 billion in 1967 to \$5.7 billion in 1969. They are expected to recover to \$6.1 billion this year.

Although concessional sales were much larger than commercial sales to the LDC's from 1962 to 1966, the difference began to narrow in the late 1960's (see Figure 4). Commercial sales to LDC's averaged about \$600 million during

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3/ The data cited in this section were largely computed from figures originally prepared by the Trade Statistics and Analysis Branch, Foreign Development and Trade Division, ERS. The reference is to fiscal years. The definition of LDC's is the same as in the previous section except that all Latin American nations are reported, including Cuba.





FIGURE 3

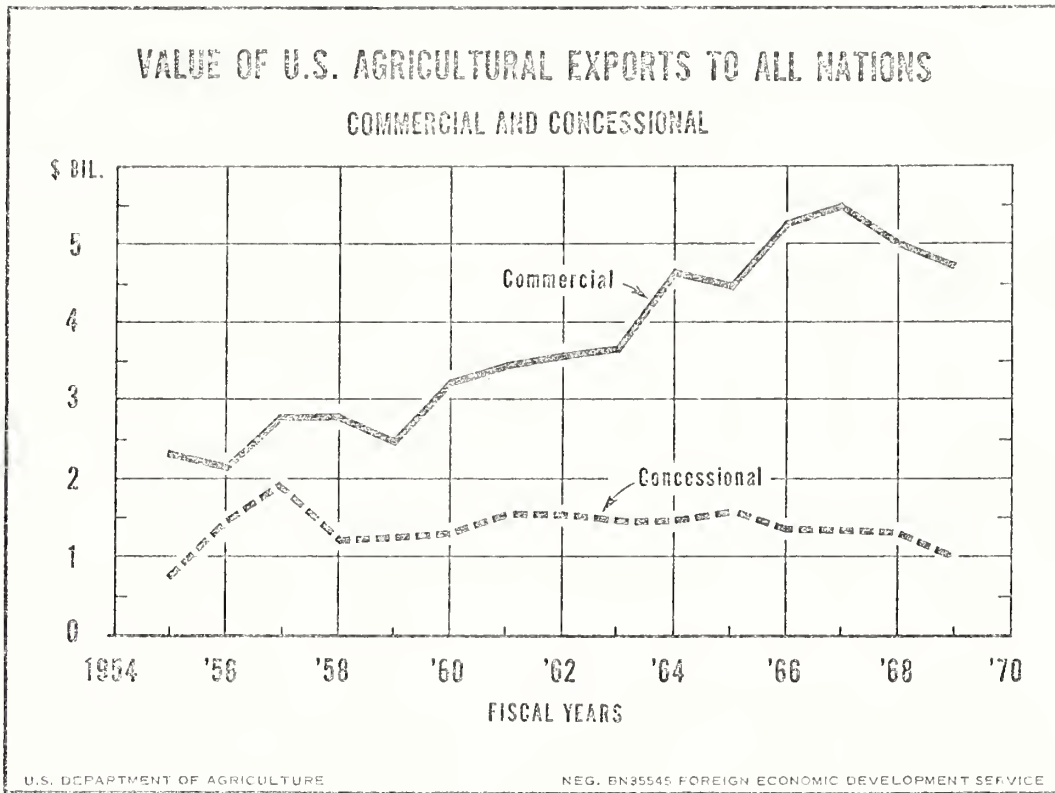
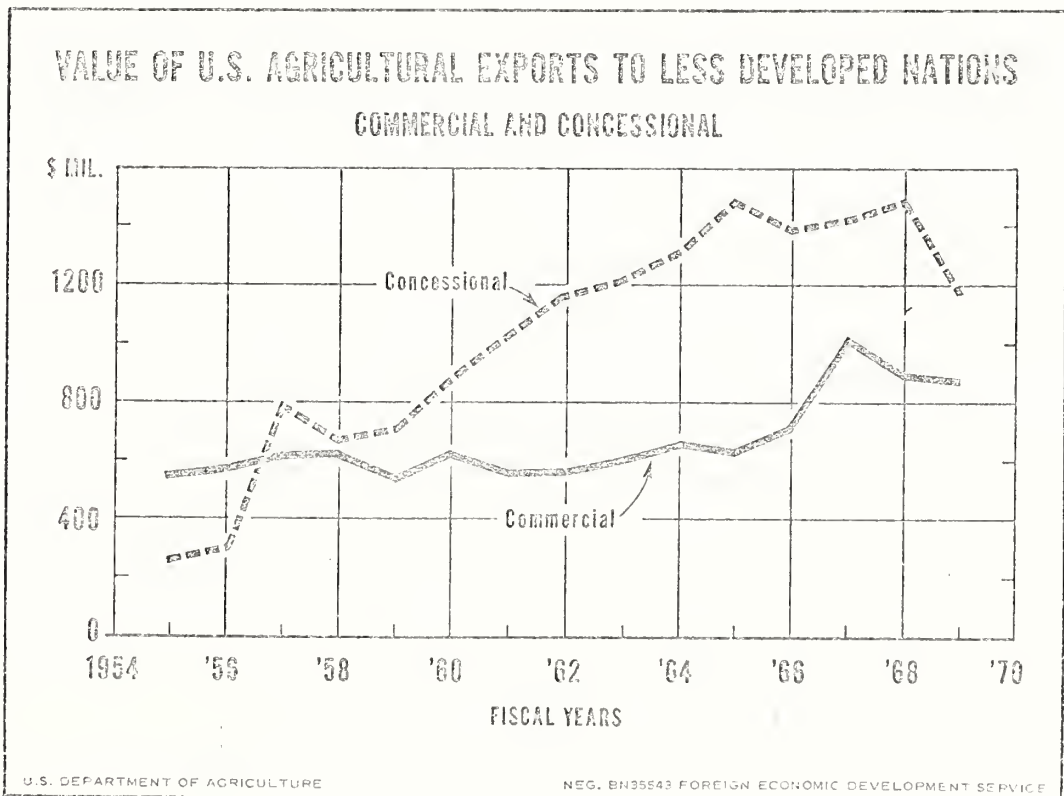


FIGURE 4





most of the period, rose to \$1 billion in 1967 and then dropped off slightly in 1968 and 1969. 4/ These data, however, are conservative with respect to commercial sales. 5/ Under the new classification system, commercial sales to LDC's were just below concessional sales in 1968 and slightly exceeded them in 1969! 6/

Within the concessional export category, these were significant changes in commodity composition. Wheat and flour exports increased through 1965 and then dropped off (see Figure 5). Except for a brief jump in 1957, exports of other commodities held about steady, possibly declining a bit.

There was also a sharp increase in wheat shipments to India and Pakistan (see Figure 6). Exports to other nations over the 1955 to 1969 period showed no particular trend (the first half of the 1960's was relatively higher; during this period, large wheat shipments were sent to the UAR). Shipments to Pakistan and India equalled or exceeded those to all other countries from 1965 to 1968. The major reason for the heavy imports was the great drop in production in 1965 and 1966 (see Figure 2) due to the monsoon failure. Shipments were continued in subsequent years to replace depleted grain stocks.

Thus we can see that the increase in concessional exports to LDC's during the mid-to-late 1960's coincided with crop failure in India and Pakistan and increased U. S. wheat exports. With that crisis past, concessional sales to LDC's are returning to a more "normal" situation.

#### International Competition

The international grain market has been one of the major areas of increased competition and this competition is coming from the developed nations.

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4/ It might be asked as to how there could be an increase when the total level of concessional exports noted in Figure 3 remained little changed. The answer lies in the changing composition of recipient countries. Many developed nations in Europe were included during the 1950's. Their role declined as that of the LDC's increased.

5/ Under the classification system used for the data presented in Figure 4 all barter sales were listed under concessional sales. The major form of barter (shipments under contracts for overseas procurement for U. S. agencies) is now classified with commercial sales. (See Foreign Agricultural Trade of the United States, March 1969, pp. 25-27.)

6/ The revised figures are (in millions of dollars):

	<u>1968</u>	<u>1969</u>
Commercial	1,127	1,026
Concessional	1,270	1,001

Revised country data for previous years are not yet available.



FIGURE 5

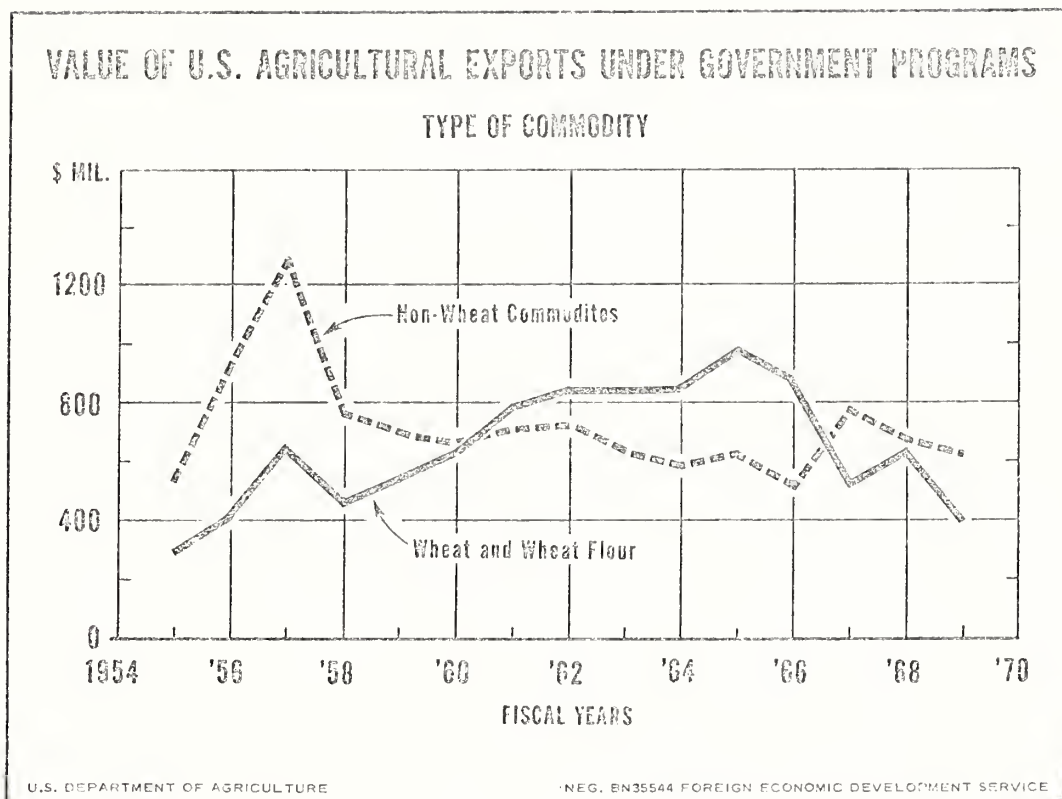
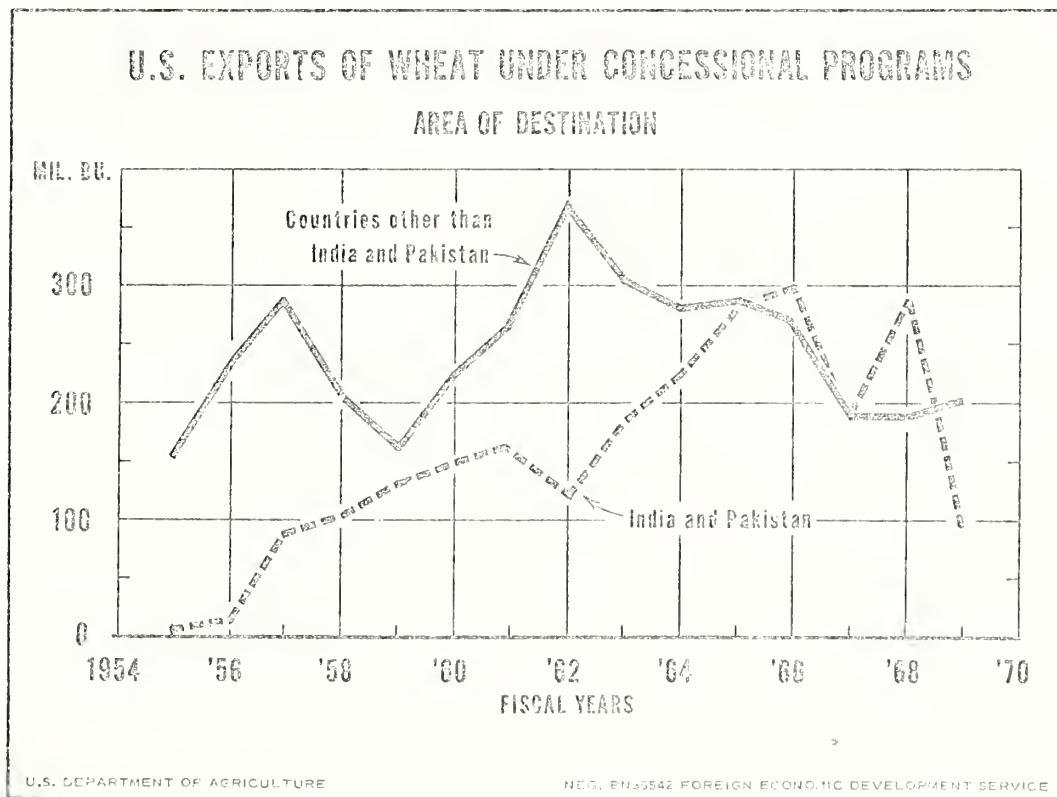


FIGURE 6





Average annual world grain production for the past four years has been 115 million tons larger than the preceding four years (the developed nations account for about 86 million tons of this increase). The recent bumper crops have raised the level of world grain stocks to new highs. Traditional exporters are well-supplied with grains. And even traditional importing countries - such as West Germany and Japan - are accumulating sizable grain stocks. These large grain stocks, with accompanying efforts to dispose of them, have sharpened competition in the world market. 7/

The volume of grain which is offered for export by the LDC's which are not traditional exporters is relatively small. 8/ LDC grain production in many cases is relatively high cost in terms of international prices. Moreover, grain marketed by these new LDC's exporters is often not of the type or quality in strong demand.

Grain from the developed countries is increasingly becoming available on concessional terms. In the early 1960's, the United States accounted for nearly 98 percent of noncommercial wheat exports; by the mid-1960's this proportion has eased to 94 percent, and during 1969 it dropped to 75 percent. 9/ In India, in 1969, the United States provided 71 percent of the concessional wheat imports; 19 percent came from the Special Canadian Food Aid Program; and 10 percent from DC members of the International Grains Agreement. 10/ What was once almost exclusively a U. S. province is no longer such.

#### U. S. Imports

In our concern with export markets, we should not forget that the United States is a substantial importer of agricultural products. In 1969, for example, the value of U. S. agricultural imports was \$4.9 billion. The LDC's accounted for nearly 2/3 of the total.

Imports are of two main types: complementary and supplementary. Complementary imports are primarily tropical goods such as coffee, cocoa, tea, etc. Supplementary imports include products to some extent competitive with U. S.

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7/ Donald Chrisler, The World Agricultural Situation, Review of 1969 and Outlook for 1970, U. S. Department of Agriculture, Foreign Agricultural Economic Report No. 57, February 11, 1970.

8/ Argentina has long been a prominent grain exporter and Thailand and Burma are traditional rice exporters. Thailand has recently become an important corn exporter.

9/ Clancy V. Jean, "The Story of the 1960's: U. S. Wheat in World Trade," Foreign Agriculture, November 24, 1969, p. 5.

10/ Foreign Agricultural Service Report No. IN0007 from New Delhi, January 20, 1970, pp. 19-20.





production. Complementary imports come almost entirely (93-94 percent) from the LDC's (see Figure 7). Supplementary imports are nearly evenly split between LDC's and DC's, with the DC's holding a slight edge.

The largest supplementary import from the LDC's is sugar. During the 1961-69 period, it accounted for about 43 percent of the LDC total. Horticultural commodities probably represent the next biggest group.

Thus, the LDC's are very important as suppliers of complementary products. It is to the benefit of American consumers that complementary products be produced and marketed as efficiently as possible. Agricultural development can help make this possible.

#### DEVELOPMENT AND TRADE

Lately, as some farmers in some LDC's developed their expertise in some crops, their counterparts in the United States have become uneasy about the prospects for foreign markets. In the short-run situation, there is a problem for certain U. S. products. But such problems must be balanced against the future growth of nations and overall U. S. trade prospects. I think the long-run holds a bright future for our exports as the developing nations grow economically.

So far, we have discussed development and trade separately; but the two are clearly linked. Agricultural development leads to economic development; this in turn leads to improved income and increased demand for all products. The increased demand brings about expanded imports. Since the income elasticity of demand for food in low income countries is relatively higher than for nonagricultural products, this means that "agricultural trade will expand faster than total trade." 11/

Agricultural imports increase for two reasons. First, the growth in demand is often more rapid than increases in production. Secondly, the full range of items desired cannot be economically produced in sufficient quantity or quality locally. Even the United States, with one of the world's most diversified agricultures, imports almost \$5 billion worth of agricultural products.

As incomes increase in LDC's, they also shift from concessional to commercial imports, in part to obtain a broader range of products. The demand for livestock products will increase faster than that for grain. Or, grain consumption may shift from coarse grains to wheat and rice. Thus, the import demand will shift to goods of a higher income elasticity.

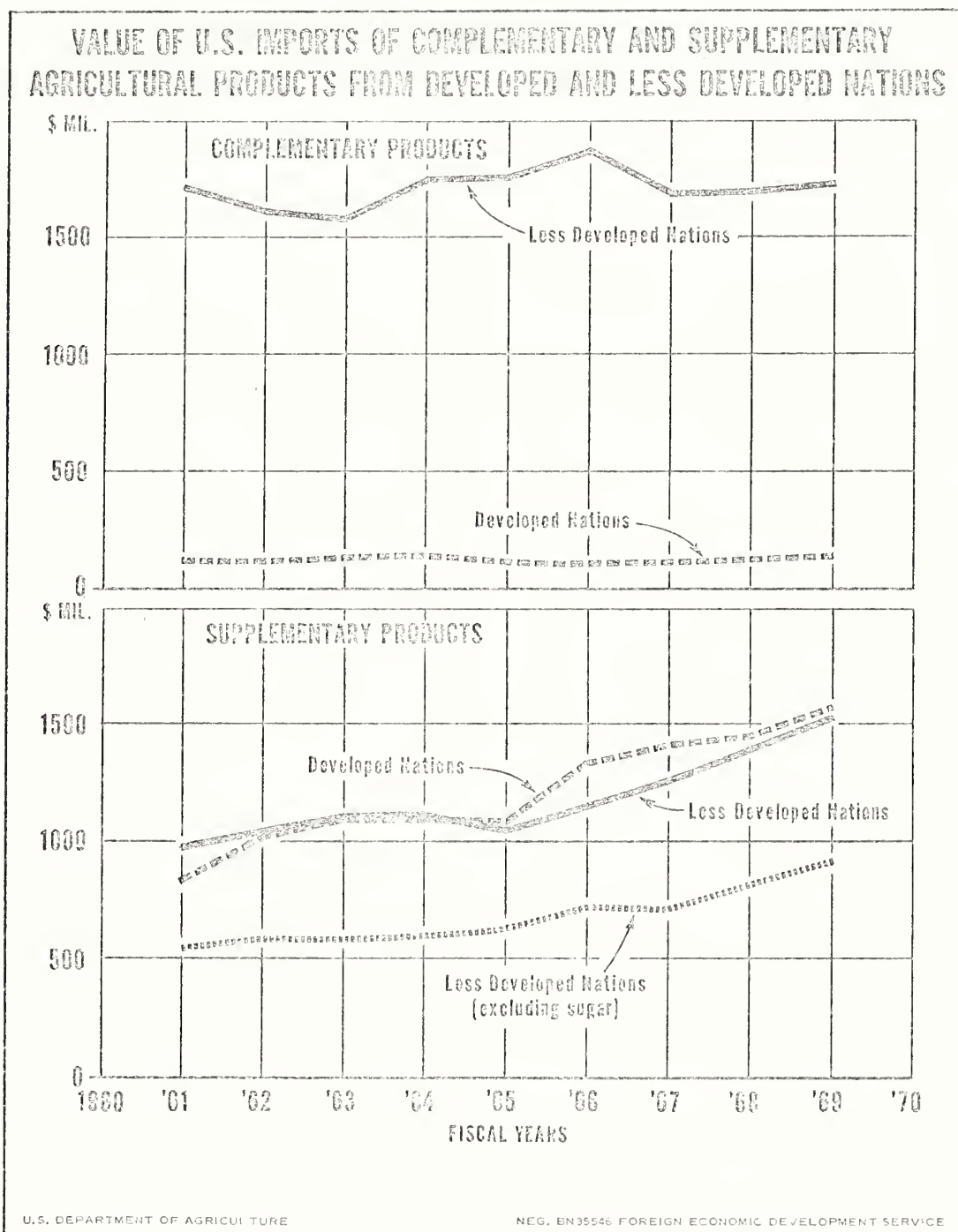
What does this process mean for U. S. agriculture? Several years ago, a study made in the USDA indicated that as per capita incomes grew, the demand

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11/ Arthur B. Mackie, Foreign Economic Growth and Market Potentials for U. S. Agricultural Products. U. S. Department of Agriculture, Foreign Agricultural Economic Report No. 24, April 1965, p. 63.



FIGURE 7





for U. S. farm products expanded more than for other nations because of their higher income elasticity. 12/ More recently, a somewhat similar analysis for LDC's suggested a positive relation between both agricultural and economic growth rates and commercial agricultural imports from the United States in the long run. 13/

But there can be vexing short run problems for developed countries resulting from increased agricultural output. There may be a reduced need for imports of certain products by the LDC's. For example, the "green revolution" has led to some replacement of food aid imports by domestic production of wheat and rice. The LDC's may also increase their exports of certain commodities. For example, Taiwan's agricultural development has led it to become a prominent exporter of canned mushrooms, asparagus, and pineapple. These have disrupted both U. S. domestic and foreign markets. The same is true of Mexican exports of tomatoes. 14/ It is difficult to speak of the "long run" to U. S. producers of these products. We have a responsibility to assist these producers in their adjustment problems.

Economic development in LDC's also has both short and long run trade implications for other LDC's. In the short run, the problems may be even more severe than for the United States, especially where LDC's tend to have the same products to export (as is true of the rice economies of southeast Asia). Over the longer run, FAO's Indicative World Plan indicates a more optimistic outlook; in fact, it suggests that trade with other developing nations may ultimately be more important than exports to the developed countries. 15/

#### PROSPECTS FOR U. S. EXPORTS TO LDC'S

The prospects for U. S. exports to developing nations may look bright as their economic development progresses; but, this is not a market which will just fall into our laps. There will be strong competition for the LDC commercial market, from other developed nations and, for some crops, from other developing nations. The market will not improve equally for all products and some may be disadvantaged. And a combination of participation from other developed nations, a hardening of P.L. 480 terms and U. S. budget restraints may well spell a continuing downtrend in U. S. concessional exports.

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12/ Ibid., pp. 33, 45.

13/ Martin Kriesberg, "Income Growth and Imports of U. S. Agricultural Commodities by Developing Countries," U. S. Department of Agriculture, Foreign Economic Development Service, unpublished manuscript, 1970.

14/ See Gilbert E. Sindelar, "The Story of the 1960's: U. S. Fruits and Vegetables in World Trade," Foreign Agriculture, December 1, 1969, pp. 2-5.

15/ Indicative World Plan for Agricultural Development, Food and Agriculture Organization, Volume III, August 21, 1969, p. 46.



## Concessional Exports

There are several forces operating which may affect the outlook for the concessional market.

Expansion Forces. To the extent that American production continues ahead of demand, and surplus stocks accumulate, there will be interest in the concessional market and P.L. 480 sales. The program has proven its ability to move U. S. farm products overseas. The proposed consensus farm bill includes an indefinite extension of the present act.

Similarly, there is likely to continue to be a strong LDC interest in continuing P.L. 480 - though the countries and commodities probably will vary from present patterns. Most of the LDC's continue to experience rapid population growth; agriculture is hard pressed to keep up. When there is a short-fall in production, due to natural conditions or special disasters, food supplies are strained. Turkey is a "green revolution" country in terms of coastal wheat production. Still, poor weather led to the need for P.L. 480 agreements for 800,000 tons of wheat during calendar 1969, the first agreement since 1966, and more are in prospect. Similarly, Pakistan thought that it would have no further need for P.L. 480 imports due to the success of its "green revolution;" yet, in 1969, poor weather in East Pakistan led to an emergency request and a recent agreement for one million tons of wheat.

In some cases, it is less expensive for LDC's to import products on concessional terms than it is to raise them domestically. The support prices for grains in many LDC countries are above world market prices. And, as much of the population in many LDC's is located in coastal cities, it may be easier to distribute imported products than to move them from the inland. In some nations, the proceeds from the sale of P.L. 480 goods are looked upon as a convenient source of local revenue. Elsewhere, an import demand may stem from a need for special quality products which are not available domestically. In India, for instance, there is a need for hard wheat for baking purposes.

From a development point of view we may not encourage all these reasons - and in some cases we may be working to lessen them (as where we try to improve the marketing of domestic production) - but they nevertheless exist.

Forces Against Expansion. There is a matter of funding and terms in the United States. A peak in expenditures on P.L. 480 was reached during 1963/64. Since that time, the total amount has decreased by nearly half. Moreover, terms have been changed. In the P.L. 480 law as amended, the President is directed to:

Take steps to insure a progressive transition from sales for foreign currencies to sales for dollars...at a rate whereby the transition can be completed by December 31, 1971. 16/

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16/ Public Law 480, 83d Congress, Title I, Sec. 103/b. As amended by P.L. 90-436, July 29, 1968.







During the summer of 1969 the terms were hardened still further when the United States discontinued financing the transportation cost, for credit sales, of the 50 percent of cargo required to be shipped in privately owned U. S. vessels. At the same time that U. S. terms have changed, other countries - as noted earlier - have become more active in the concessional market.

Increasing concern with foreign debt accumulations by LDC's, a matter which was discussed at length in the Pearson Commission Report, 17/ could lead to a greater hesitation about entering into P.L. 480 agreements. LDC alternatives could include belt tightening or an intensified search elsewhere for better terms.

The result of this combination of forces is likely to be a continuing down-trend in U. S. concessional exports.

#### Prospects for Wheat Exports

How are these forces reflected in projections for exports of U. S. agricultural products? Let's look at wheat as an example. There will be no slackening in wheat import requirements of the LDC's, according to an AID-sponsored demand prospects study now being completed by the Department's Economic Research Service. 18/ Indeed, net LDC imports in 1980 are projected to be almost 50 percent higher than during the mid-1960's. Imports would be up fairly evenly in all regions except in South Asia where they would decline. The population growth rate in these regions is high and the demand for wheat is quite responsive to an increase in income. On top of this, there has been a shift in consumption patterns to wheat. Furthermore, it is difficult to produce wheat in many parts of the developing world because of climatic or agronomic conditions.

The developed countries will have more than enough wheat to provide these import needs. The questions will be: who will provide it and on what terms? How much will be provided by the United States? Will it be concessional or commercial? Other Department economists, taking into account budgetary restraints, market conditions, etc., project a gradual increase in overall U. S. wheat exports due to an increase in commercial exports through 1975 (concessional exports are expected to hold about steady or decline in some years). The LDC's will play a role in these increased commercial sales. Among the most promising areas are South Korea, Taiwan, the Philippines, Venezuela, Central America and the Caribbean.

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17/ Partners in Development (Report of the Commission on International Development), Praeger, New York, 1969, pp. 153-167.

18/ The project, "Analysis of Demand Prospects for Agricultural Exports of Less Developed Countries," is nearing completion and is expected to be published soon.



## IMPLICATIONS FOR DEVELOPMENT AND EXPORT POLICY

Over the past 15 years, U.S. commercial exports to the LDC's have not decreased; rather they increased slightly through 1966, then jumped to a higher level (see Figure 4). Concessional exports to LDC's have shown a different pattern: they increased in the mid-1960's when there was an extraordinary drought in South Asia and a need for emergency grain imports, but have since returned to a more "normal" situation.

In the short run, there have been and undoubtedly will be some adjustment problems for individual commodities; a study of ways to alleviate these difficulties is needed. Over the longer run, the linking of agricultural development with economic growth will increase the demand for a wide range of agricultural products and in turn for imports.

The longer run problem then will be for the United States to compete for these commercial markets. Recent increases in grain production throughout the developed world will make competition in this area particularly severe.

But even if agricultural production does increase in LDC's and at the same time the demand for imported commodities also increases, there will still be hungry people. This is a problem in our own country; it will be even more critical in the LDC's. Food aid will be needed to provide welfare food programs for the disadvantaged. Then, too, there will be LDC's which do not experience development and will need to continue concessional imports.

We have, then, a dual situation: where agricultural and economic development is taking place, we will likely see a move from concessional to increased commercial imports; where development is not taking place there will be a continuing need for concessional imports. In either case, there will be strong competition for the market.

In total, I think it unwise to base our export market hopes on someone else's production failures. It is becoming quite clear that solid dollar markets are growing in the developing nations and it seems to me that it is our place to help these markets grow, through alert marketing of our own products and through assistance to LDC agricultural growth. As you are well aware, agricultural development in these nations is a long, hard, complex struggle; but, it is a struggle which must be made for their good and ours.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

THE WHITE HOUSE CONFERENCE ON FOOD, NUTRITION, AND HEALTH:  
OVERVIEW AND OBSERVATIONS

Talk by Kenneth R. Farrell  
University of California, Berkeley, California  
at the 1970 National Agricultural Outlook Conference  
Washington, D. C., 9:30 a.m., Tuesday, February 17, 1970

To attempt to place in perspective the content and contributions of an event such as the White House Conference on Food, Nutrition and Health is a formidable and, in several respects, risky venture; formidable because of the scope and wide ranging nature of matters involved and the sheer volume of recommendations emerging from the Conference; risky in the sense that to rely principally upon the "written word" as I must do may be to miss the "spirit" of the Conference and the nuance of the dialogue--aspects which, in the long run, may be as significant as the multitude of recommendations contained in the final report. And because of the wide diversity among participants in terms of background, attitudes and expectations regarding the Conference, there inevitably will be divergence in judgments of the contributions of the event.

For purposes of this Conference, I have attempted to glean and amalgamate from the several hundred recommendations of the final report those which bear most directly upon researchers, educators and administrators in the Colleges of Agriculture in Land Grant Universities and in the U.S. Department of Agriculture. Before presenting those recommendations, I will comment on the purposes and organization of the Conference.

1. Purposes and Organization of the Conference

On May 6, 1969, the President announced that he would call a conference "...to advise [himself], the Congress and the American people on the development of a National policy aimed at eliminating hunger and malnutrition due to poverty and at improving the nutritional health of all Americans." On June 11, 1969, Dr. Jean Mayer, Harvard University nutritionist, was appointed as Special Consultant to the President and charged with organizing the Conference ultimately held in Washington, D.C., in early December 1969. Nearly 5,000 invitees were addressed by the President at the opening plenary session.

The Conference was, in several respects, unconventional. Twenty-six panels of academic, medical, industry and agricultural experts and citizens





chosen because of their particular concern with the issues of the Conference were appointed in the late summer to develop reports including recommendations on National policies, programs, and priorities in six major fields: (1) Surveillance and evaluation of the state of nutrition, (2) nutrition of vulnerable groups, (3) the provision of food as it affects the consumer, (4) nutrition teaching and education, (5) food delivery and distribution, (6) voluntary action to help the poor. Each panel was comprised of an admixture of experts and laymen: Each drew upon consultants to provide additional expertise and information from the public and private sectors: Each was given liberal license to range broadly over the issues involved in their assigned field. The panels were interdisciplinary, intersectoral and designed not for ready consensus, but for expression of differing points of view. It was clear that the emphasis was to be on action, not protracted study.

The emphasis on immediacy and action (translated during the Conference into the slogan "Bread Now") was underlined by creation of eight task forces involving a wide spectrum of citizens including social action groups, students, women's organizations, industrial and consumer interests, professional organizations and religious denominations. The task forces not only developed reports and recommendations of their own, but functioned in a highly motivated manner as critics of the panel of experts' reports and recommendations in the week prior to the Conference and during the three days the Conference was in session. On the basis of their performance in the meetings of the panel with which I was associated, I would conclude that they played their role as critics quite ably and were instrumental in modifying initial recommendations of the panels even if not always to their complete satisfaction.

By the time the Conference convened on December 2, the air was charged with expectations of challenge, confrontation and conflict among the 800 panelists and task force members and the 2,200 additional invitees selected from cross-section of society and including 400 of the very poor themselves. Those expectations were to be fulfilled as panel presentations were made and the issues joined. On balance, the discussions were orderly, frequently fervent, occasionally heated. In addition to the main events, several dramatic ad hoc activities were staged to underline goals of various groups.

I mention these organizational and procedural aspects because they were important determinants of the products which emerged from the Conference.

## 2. Major Recommendations

Before turning to specific recommendations of the Conference, I will mention several recurring themes which permeated the proceedings. First was the theme that malnutrition is sufficiently extensive in the various strata of our society as to constitute a major social concern not only for humanitarian or moral reasons, but for reasons of loss of potential real wealth and productivity. Second, that while we need increased public and private action to reduce the incidence of malnutrition in all social strata, there is an immediate need for action to eliminate hunger and malnutrition due to poverty. Third, that while food programs should be extended and enhanced in the short run to





eliminate hunger and alleviate malnutrition, the ultimate objective of public policy should be to eliminate poverty through some type of cash income supplement program. A fourth theme was the need for improved coordination in the development of policies and execution of programs bearing upon food, health and nutrition within the Federal Government and between the Federal, State and local governments. Fifth, that we must step up the tempo of our research education effort directed to the various facets of nutrition, food and health to contribute to the long run improvement of health and nutrition.

A joint resolution of six task forces representing citizen groups calling for action of five major types was presented to and endorsed by participants at the closing plenary session of the Conference. Although certainly not all of the participants concur in detail with these recommendations, and the endorsement was, therefore, in Dr. Mayer's words "...[of] symbolic significance only, representing essentially an endorsement of principles," the statement captures better than any other single statement the essence of the major policy, program and priority recommendations of the Conference.

"I. A NATIONAL EMERGENCY

"There is a hunger and malnutrition emergency in this country today. Therefore, the President must immediately declare that a national hunger emergency exists, and under existing authority must now free funds and implement programs to feed all hungry Americans this winter.

"II. GUARANTEED ADEQUATE INCOME

"The overriding remedy for hunger and malnutrition is a minimum guaranteed adequate cash income with a floor of \$5,500 annually (for a family of four). The government must also guarantee a meaningful job with a living wage to those who can work, elevation of wages and benefits to those presently underemployed, the 'adequate income' to those unable to work or find employment, and maximization of the purchasing power of the food dollar for all.

"III. INTERIM FOOD PROGRAMS

"As interim measures only, present food programs must be reformed and expanded immediately in order to assure truly adequate benefits and participation by all who need them in all parts of the country.

"IV. UNIVERSAL SCHOOL FOOD PROGRAMS

"A national free lunch and breakfast program must be made immediately available to all children, through secondary school and regardless of income, that will provide at least 2/3 of the minimal requirements of the Recommended Dietary Allowance,



while respecting cultural food preferences.

#### "V. RUNNING THE PROGRAMS

"All administrative responsibilities for all hunger relief and nutrition programs must be shifted from the U.S. Department of Agriculture to the U.S. Department of Health, Education and Welfare, with corresponding shifts in Congressional Committee responsibilities. The recipients of these programs must have responsibility for local administration of the programs under standards determined at the Federal level."

The final reports of the 26 panels were, on the whole, consistent in direction, if not in detail and manner of proposed implementation with the foregoing policy and program recommendations. I will briefly highlight the major recommendations presented in each of the six fields of study.

##### A. Surveillance and Evaluation of the State of Nutrition

Identification of nutrition and health deficiencies is basic to any corrective program. "Judgment as to the incidence and severity of these deficiencies has been based, to a considerable extent, on intuitive knowledge." Recommendations of the three panels included:

1. Nutrition surveillance and monitoring in HEW aimed at selected target populations and areas with primary attention to the poverty population of preschool children, expectant mothers, primary school children and other categories of persons with low incomes, such as Indians and migrant workers.
2. More effective provision for surveillance, evaluation and education as a "built-in" component of Federal food delivery and other aid programs that relate to high risk groups.
3. Continue existing methods for collecting dietary intake information at the National level, but modify the U.S.D.A. food consumption surveys as follows:
  - (a) Broaden in coverage and coordinate with nutrition and health surveillance.
  - (b) Conduct every five years.
4. Adopt for use in the immediate future, standards for evaluation of biochemical and clinical examinations currently employed in the National Nutrition Survey, but increase research to improve methodology for evaluation of nutrition and health.



Among the several recommendations relating to Federal and State administrative structures were:

1. Create position of Special Assistant to the President for Nutrition.
2. Assign to the Secretary, HEW, Government-wide policy and coordinating responsibilities for food and nutrition as they relate to health.
3. Establish within HEW an Office of Nutrition to plan and implement an effective surveillance and monitoring system linked and cooperating with State, county and local nutrition and health units and with appropriate programs of HEW and other Federal agencies.
4. Create Area Nutrition Centers to assist in surveillance and monitoring of nutrition, to transmit information and facilitate health and nutrition related activities.
5. Encourage State governments to establish a major unit and appropriate committees concerned with surveillance and monitoring of nutrition.

B. Nutrition Guidelines for Vulnerable Groups

Six panels dealt with special needs and problems of nutritionally vulnerable groups, territorial and other groups for whom the Federal Government has special responsibilities. In addition to general recommendations favoring transfer of food programs to HEW, development of a guaranteed annual income plan, increased scope and coverage of the Food Stamp Program as an interim measure and increased emphasis on nutrition education throughout the population, several dozen specific recommendations were formulated including:

1. Focus on the family as a unit in development and administration of food delivery and nutrition education programs. There was criticism of the fragmentation of food, nutrition and health programs of the Federal Government.
2. U.S.D.A. food programs should be coordinated and integrated with other health and nutrition services, i.e., problems of food, nutrition and health are multidimensional and require concurrent approaches from several directions, including provision of adequate health services for low income vulnerable groups.
3. Expanded research and education programs concerning several nutrition-related health problems of an affluent society.



4. Review of current policies and practices with respect to enrichment, particularly iron: Encourage production and use of iodized salt.
5. Development of a new line of foods to meet special needs of elderly persons.
6. Development of a new system of food delivery by which meals supplying a substantial part of nutrient requirements can be distributed to the elderly through restaurants, institutions, and private homes when necessary.
7. Create a Federal Nutrition Commission to develop a National nutrition policy.
8. Improve the market infrastructure, encourage increased production (particularly livestock and dairy) and fortification of indigenous foods in the various territories and islands for which the United States has special responsibilities, e.g., Guam, Virgin Islands, Puerto Rico.
9. Assure that all public food, nutrition and health programs are made fully available to special vulnerable groups--Indians, Eskimos--taking into account the special problems which these groups may have in health and nutrition and in availing themselves of public services.

C. Provision of Food As It Affects the Consumer

The four panels examining this aspect directed their recommendations at simplifying legislation, encouraging greater innovation by industry in the development of new and nutritionally improved foods while, at the same time, insuring better protection of the consumer as regards safety, quality and meaningful disclosure of content and nutritional value. Some of the more specific recommendations were:

1. The problems of hunger and malnutrition should be addressed through use of traditional foods, some to be immediately fortified with appropriate nutrients. Of particular concern was iron fortification and possible nutrient deficiencies which may have arisen from decline in consumption of milk.
2. Amendment of milk pricing policies to encourage production of milk with lower fat and higher nonfat solids content.
3. Amendment and harmonization of Federal regulatory policies with respect to safety, sanitation, identity and labeling of foods.







4. New standards and labeling requirements to impart to consumers more accurate and useful information concerning the composition and nutritional properties of food.
5. Federal Government development and maintenance of nutritional guidelines for various classes of foods and food combinations.
6. Increased research, particularly
  - (a) Genetic research on the important food crops.
  - (b) Effect of modifications of traditional foods and introduction of new foods in the National diet.
  - (c) Significance of fats to public health.
  - (d) Continuous dietary and epidemiological surveys.
7. Among recommended legislative changes were:
  - (a) Repeal of Filled Milk, Filled Cheese, Butter Act and Dry Milk Solids Acts.
  - (b) Revision of the Delaney Clause of the Federal Food, Drug and Cosmetic Act to better assure safety of foods.
  - (c) Passage of a National Food Sanitation Act.

D. Nutrition Teaching and Education

The four panels dealing specifically with nutrition teaching and education and many of the other 22 panels recommended extensive expansion of both public and private nutrition education programs at the preschool, school, university and community levels through the various media and by many different approaches. Of the several dozen recommendations, I will mention just a few:

1. Appointment of a Coordinator of Nutrition Education Services in the United States Office of Education.
2. Inclusion of a comprehensive and sequential program of nutrition education in the curriculum of every school.
3. Improved training and opportunities for continuing education in nutrition for teachers, physicians, nurses and allied health professionals.



4. Incentive programs of several types to increase manpower for teaching nutrition at all levels of society.
5. Create a National Nutrition Education Media Center to support out-of-classroom educational efforts. Another proposal was to establish community nutrition centers to facilitate exchange of information, provide consulting and counselling services, assist in recruiting workers for community education programs.
6. Other recommendations suggested methods of more effectively using the mass media, and food delivery systems as vehicles for nutrition education. Several recommendations pertained to mis-information and deception through the media.

E. Food Delivery and Distribution As a System

Among the recommendations of the four panels were:

1. Review of the adequacy of the U.S.D.A. Low-Cost Food Plan as a standard for determining money necessary to purchase an adequate nutritious diet; suspend publication of the Economy Food Plan. Based on this review, U.S.D.A. should publish a quarterly standard food budget by regions, such standard to be used by all States and Federal agencies in determining eligibility for income maintenance programs.
2. Strengthened program of economic and managerial assistance to food distributors in low-income inner city areas.
3. Expanded food distribution facilities in rural areas, including transportation to markets and mobile food stores for low-income consumers.
4. Support development of new low cost nutritious foods.
5. Accelerate nutrition education and information on the part of food manufacturers and retailers: consider special tagging of foods of high nutritional value.
6. Consider feasibility of Government purchase of nutritious food products for resale by selected organizations in low-income areas to low-income consumers.
7. Eliminate sales taxes on food, especially food stamp purchase.
8. Strengthen family living education: Consider impacts of programs on family life before initiated.



9. Establish a Department of Human Resources charged with responsibility of policy-making, monitoring, co-ordinating and evaluating all matters concerned with the human condition.
10. Federal subsidies to encourage corporations, cooperative and self-help processing, purchasing and marketing facilities, expand manpower for nutrition education and increase employment in low-income areas.
11. Liberalize Food Stamp Program, including:
  - a. Families of 4 with incomes below \$100 per month should receive \$125 worth of free stamps per month.
  - b. National eligibility and self-certification procedures.
  - c. Issue stamps weekly.
  - d. Use food stamps for personal cleanliness, hygienic and home sanitation.
12. Systematic research on the effect of assistance programs on food consumption patterns and levels of nutrition.
13. A new approach to utilizing the school as a food delivery system, including:
  - a. A crash program to close the nutrition gap in 1970.
  - b. A two-year research and development phase preparatory to developing an effective long-range program.
  - c. A comprehensive nutrition program for children and youth.
14. Create a National Council on Nutrition within the Executive Office of the President.

F. Voluntary Action to Help the Poor

The highlights of the five panels' recommendations are:

1. Acceleration of research related to food fortification, production, and marketing of high lysine corn, production of new low-cost foods.
2. Special programs to improve the lot of small farmers.



3. Commission to review barriers to interstate commerce in milk; another to re-examine agricultural policies for possible conflicts with National food and nutrition goals.
4. Special, one-time 20 percent investment credit to individuals or corporations to establish new or expanded retail food outlets in designated areas.
5. Establish a Federal Urban Business Insurance Corporation to provide insurance to inner city businessmen against major casualty losses when commercial insurance is not available at rates similar to those in suburban locations.

### 3. Conclusion

From these glimpses into the final report submitted to the President, you can gain an impression of the comprehensive, wide ranging nature of the Conference. Virtually all facets of the problems of food, nutrition and health were touched upon to some extent. There is much in the report to be commended to you for study and reflection.

It is not a tightly organized, internally consistent, unambiguous report. The Conference was not so designed. Nor is it a blue print for development of a singular Congressional Act or a singular Presidential initiative. It calls for action on several fronts simultaneously by the Congress, the President, Agency Administrators, researchers, educators and the public. It is multi-dimensional just as the problems of hunger, malnutrition and poverty are multi-dimensional. While some recommendations can and should be (in fact, have been) implemented immediately, much of the report will require careful sifting; reconciliations will need to be made among recommendations; means will need to be sorted from ends; projects and activities will need to be cast in terms of programs--consistent, additive, coordinated programs; budgets must be formulated and allocated in some system of priorities. In short, much needs to be done to achieve the goals shared by many of the 5,000 who attended the Conference and, I believe, by millions of other Americans.

But these necessities should not divert us from the goals themselves or cause us to lose the message of the Conference expressed eloquently by William D. Carey near the conclusion of the Conference on behalf of the 24 panel chairmen. I quote in part from that statement:

- "1. Hunger is not a statistical abstraction. It is real, and it is a disgrace.
- "2. This Nation can afford -- now -- to erase that disgrace. And it must.
- "3. Hunger is the dark side of poverty. It will end when we escalate and finish the war we started against poverty.





- "4. We can, and inevitably will, argue over means. But this Conference is in no doubt whatsoever concerning ends.
- "5. We must be clear about our priorities. The paramount priority is ACTION NOW--

ACTION to cut red tape and get food to the poor on an emergency basis;

ACTION to make realistic income payments to the poor;

ACTION to convince an apathetic society that its big successes are matched by equally big failures."

In my judgment, the Conference was useful. To be sure, some went away frustrated, some angry, some with despair. But I would venture that many went away feeling a little more humble, a little more concerned and a little more prepared to help in meeting the challenge.

Dr. Mayer's observations on the contribution of the Conference are fitting in closing this presentation. In his judgment, the greatest contribution of the Conference may be:

"The demonstration that, at a time when divisions and confrontations are common in our land, forceful and sometimes militant Americans of all walks of life and persuasion can be brought together and, after spirited discussion agree on common priorities in the service of the country and of one's fellow-man...The fact that conservatives could be shown to display compassion, and a desire for reform, that liberals could be shown to display restraint and responsibility, that the young could work with the middle-aged, that academics could speak in intelligible fashion to the poor, that minorities could see the common interest, that the majority could demonstrate a new concern for the minorities. . ."

The ultimate criterion by which the Conference will be judged is, however, what the President, the Congress, you and I choose to make of it.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Food and Nutrition Service

"TO PUT AN END TO HUNGER"

Talk by Edward J. Hekman  
Administrator

at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 10:15 A.M., Tuesday, February 17, 1970

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Many of you were here in this same Auditorium, last year, for the 1969 Outlook Conference. I know you remember the earnest address with which Secretary Hardin greeted you, in his first major appearance as our new Secretary of Agriculture.

It is especially significant that food assistance headed the list of things that were uppermost on his mind as he embarked on his new duties, of giving new drive and direction to the Department.

When the Secretary told you of the new emphases that he saw in Agriculture, he spoke first -- you will remember -- of "the effort to remove malnutrition from our land."

"We are hoping," he said, "to move with every possible resource we can muster in this direction." His remarks on this subject cover fully a page of the 4-page transcript of his address to you. Let me suggest that you re-read those remarks, in your files of last year's Conference. In them, Secretary Hardin reported that he was going to the White House to meet with the new Urban Affairs Council, of which he had been named a member.

Over the next three months, the deliberations of that Urban Affairs Council progressively evolved into the action the Secretary had hoped for.



On May 6th, President Nixon sent a milestone message to the Congress -- the message which evolved from those studies of the Urban Affairs Council. That's the message in which President Nixon enunciated his now famous commitment that:

"The moment is at hand, to put an end to hunger in America itself, for all time."

It was in that May 6th message, too, that the President declared his intention to call a White House Conference on Food and Nutrition. The Conference has completed its work, now, under the able leadership of Dr. Jean Mayer, and many of you have seen the 625-page Conference report.

All Americans have been committed by their President to the elimination of hunger "in America itself, for all time." We in the Food and Nutrition Service are committed to this, and we trust that every American is so committed.

Then it becomes a question of how this job can be done. I hope that, in these few minutes here today, we can report to you on some of our activities, and take a broad look at how we, as Americans, can expect to reach the goal that has been set for all of us.

First of all, I would suggest that there must be a recognition, a consensus, that there is a need -- that there is hunger in America. Thankfully, hunger in America has been made visible. The conscience of America has been awakened. Without this, no social need can be met in our democratic society.

Second, there must be a commitment on the part of Americans to meet the need as this need has been demonstrated.

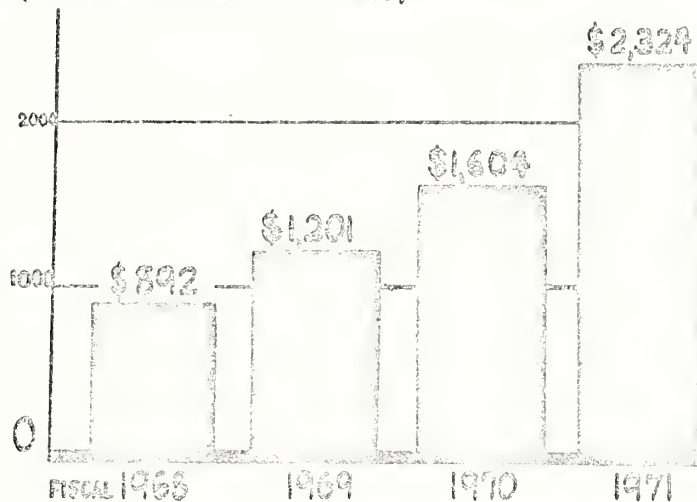
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Third, this commitment must be expressed in "tools" from the Congress in terms of adequate legislation and the necessary appropriation. Let me show you a chart, now, of the F-N-S budget request for 1971, and the comparable figures for earlier years:

### FOOD ASSISTANCE PROGRAM - TOTALS

(IN MILLIONS OF DOLLARS)



This is an on-going relationship with the Congress. It is not our purpose here to review the status of legislative or budget requests from the Administration, except perhaps to point out that -- especially in the area of food stamps -- additional legislation would be helpful in reaching our common goal.

Fourth, given the tools and given the commitment, we need programs, well-structured programs, to make food available to the hungry -- to translate legislation and money into food for the hungry. But programs are no better than the personnel that carry them out. I have been in Agriculture for only 6 months, but this time has provided me with an opportunity to visit broadly in America, and to get to know the people in the Food and Nutrition

(more)





Service, both here in Washington and in all of our Regional Offices. I am happy to tell you -- and I know this is important to you -- that the people we have in the Food and Nutrition Service know their job, and are dedicated to use the means that America has made available to them to do what they can to meet this goal.

Important as it is that we have trained personnel in F-N-S, it is equally important that the elected officials and the administrative people in the 50 States, and in the territories, be individuals with whom we can work on a cooperative basis -- taking these Federal programs to the State and local level, and there together working out a joint local-State-Federal program to get the job done.

I have visited in many States, with Governors and administrative people in welfare and educational offices. I have seen the three programs -- Child Nutrition, Commodity Distribution, and Food Stamps -- as they operate at the local level. And I am convinced that this is the way -- through local, State and Federal cooperation -- that we shall accomplish our common objectives. I have been impressed by the dedication, and by the training for their jobs, that is found at these levels of Government -- the same sort of dedication and training that I find among our Federal staff.

The F-N-S organization represents only a very small part of the administrative staff that carry out these vast programs. The answer, as I am sure you know so well, is that these are, effectively, local-State-Federal programs. We in Agriculture wish to keep them in this framework, seeking ever to make the relationship more effective, and to make the programs ever more responsive to the individual citizens who use them.

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Finally, in this catalog of necessary steps to reach our goal -- and this list is not all inclusive -- I would mention what I think is a very important ingredient. That is, the absolute necessity of convincing the American public that the funds and the programs are effective. Here, we can have no credibility gap.

I am convinced, as a citizen -- and also as Administrator of your Food and Nutrition Service -- that we are going to go just as far as we have the backing of a broad segment of America. And we will have this backing, only if the American public is convinced that the programs are making a substantial contribution to reaching the goal, that they are efficiently run, and are responsive to the needs of the hungry in our Nation.

It is important for us who are Administrators to look back, once in a while, over our shoulder. I know we should be looking forward. But I think that it's equally important that we be willing to look backward -- to see if anybody is following us.

In the balance of the time that I have here, I would like to tell you how your Food and Nutrition Service is using the tools, and how it is operating the programs, to help to get this job done.

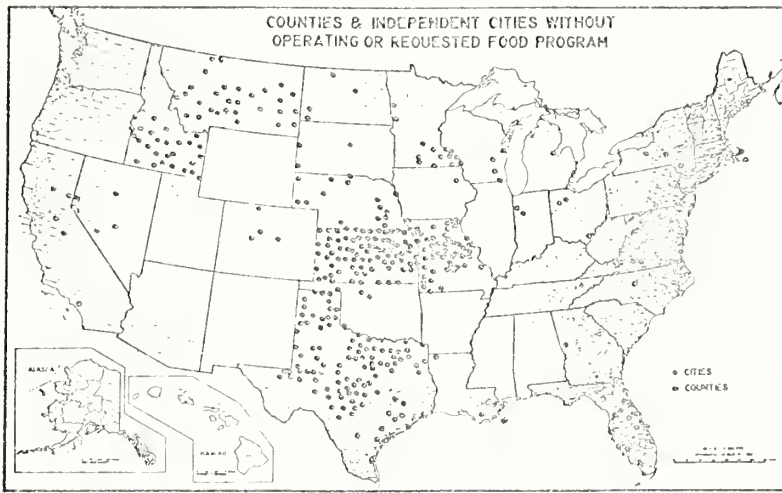
As you know, there are basically three programs -- Child Nutrition, Commodity Distribution, and Food Stamps. Let's talk first about our goal to get a family food program into each of the counties of the United States.

We have conducted a campaign, since the President's message, to make food programs available to all the 440 counties which at May 6th had no food assistance program. We have cut that number down, now, to 266. And we are going to push ahead, as the President said, to get a food program into every county by the end of this fiscal year, by June 30.

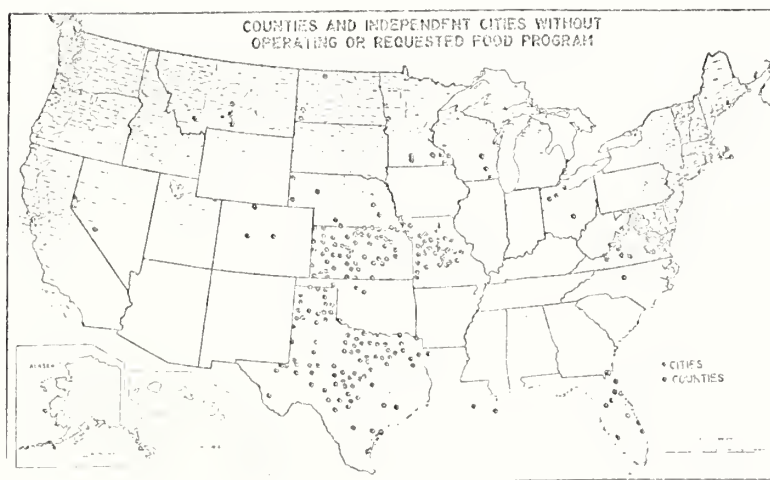
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Let me show you what this means in terms of availability of food programs to poor people throughout the country. Starting with the May 6th figure of 440 counties without programs -- here is where those counties were located:



And now that we are down to 266 counties -- here is where those remaining counties are located.



(more)



We'd like all the help you, and everyone else can give us, in getting food programs started in those counties. To help you to help us, we've printed a list of the 266 counties as an appendix to the copies of my talk. I hope you'll take that list with you -- and see what you can do.

We in F-N-S are anxious to get these programs into all the counties, and feel that this should be done on a voluntary basis. We are glad that, in this effort, we are getting real help from the Governors of the States that have counties without programs. I have visited with several of these Governors, and it wasn't necessary for me to detail to the Chief Executive, the counties that did not have a program. Rather, the Governors were telling me -- detailing what steps they had taken from their Executive Offices to work with the counties to establish programs.

I am confident this job will be done by June 30th. We in F-N-S are so committed to the Secretary of Agriculture.

Let me tell you now of the considerable improvements that we have made in the Food Stamp Program. As soon as the \$610 million dollars for this year was appropriated, Secretary Hardin announced major modifications in the program, which amount to the fact that participants pay less and get more -- get enough more so that every family can buy the USDA's "Economy Food Plan."

Eligible participants have responded enthusiastically, as we have been able to get these modifications into effect. Some counties put the improvements into effect quickly, and we have these reports on what has happened.

Thirty-five areas put the new schedule into effect in January, and we now have preliminary reports from 18 of them. Program participation in January increased 20 percent over December in those areas, and the total value of food coupons distributed increased by almost 46 percent. More importantly, the total value of bonus stamps given to participants increased by almost 110 percent.

(more)





Our Child Nutrition Programs are a counter-part of our Family Food Programs, and we have re-oriented these programs to put their prime force into providing meals to children who come from poor homes. We have a goal of extending free or reduced-price lunches to all 6,600,000 school children from low-income families, who need such help, by Thanksgiving time.

That, also, is no easy objective, and we will welcome all the help you can give us. With such help, we're confident that we and our local and State partners can come up with the innovations that will enable us to make our mark.

We're drawing, for example, on the know-how of the Nation's food management companies, to get lunches into schools we've never been able to reach. We've given notice of our intention to make that change, to State School Lunch Directors, who are our cooperators in the States, and they welcome the innovation.

This was one suggestion that came to us out of the White House Conference. We are checking those recommendations carefully, to garner all the good we can from them. We are, for example, working with the special needs of Indians on reservations. We have re-oriented dry milk purchases to get as much "instant" as possible. We're about to enunciate a new policy on "engineered foods." We're getting more nourishment into the foods distributed to needy families through our Commodity Distribution Program. We're dedicated to bold innovations, and we'll have many more of them to tell you about, when you come back next year.

Now, this has been somewhat of a report to you from your Food and Nutrition Service. I think what we are doing here is terribly important, and hope you share this concern. We thank you for the tools -- the legislation,

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the appropriations. But above all we are thankful for your concern and for the help that you have given us and that I know we can look for, in this common effort to reach the goal that President Nixon has set for all Americans.

###



FAMILY FOOD PROGRAMS: Counties and Independent Cities Without Programs

Counties . . . . . 258

Independent Cities . . . . . 8

TOTAL . . . . . 266

COLORADO

Douglas

Jackson

Pitkin

FLORIDA

Charlotte

Citrus

Flagler

Indian River

Marion

Martin

Nassau

Osceola

Putnam

St. Johns

KANSAS

Barber

Brown

Butler

Chase

Cheyenne

Clay

Cloud

Coffey

Comanche

Doniphan

Edwards

Ellis

Finney

Geary

Gove

Gray

Greeley

Harvey

Haskell

Jewell

Kiowa

Lane

Logan

Marion

Marshall

Mitchell

Morton

Nemaha

Ness

Norton

Osage

Osborne

Ottawa

Pawnee

Pottawatomie

Pratt

Rawlins

Republic

Rice

Riley

Rooks

Rush

Russell

Scott

Seward

Sheridan

Smith

Stafford

Stanton

Stevens

Summer

Thomas

Trego

Wabaunsee

Wallace

Washington

Wichita



LOUISIANA

Bossier  
Plaquemines  
Terrebonne

MASSACHUSETTS

Barnstable  
Dukes  
Nantucket

MINNESOTA

Clay            Olmsted  
Dodge          Watonwan  
Fillmore       Wilkin  
Martin         Winona

MISSOURI

Andrew        Henry          Saline  
Atchison       Holt  
Audrain        Howard        Vernon  
Barton         Jasper  
Bates          Johnson  
Boone          Iacleda  
Callaway       Lafayette  
Camden         Macon  
Carroll        Miller  
Cass           Moniteau  
Cedar          Morgan  
Chariton  
Cole           Pettis  
Cooper         Phelps  
Crawford       Platte  
Franklin       Pulaski  
Gasconade      Ray

MONTANA

Carbon  
Golden Valley  
Madison  
Stillwater

NEBRASKA

Grant                Red Willow  
                      Saline  
Kimball              Sioux  
Polk

NEVADA

Esmeralda  
Storey

NORTH CAROLINA

Randolph

NORTH DAKOTA

Bowman  
Renville  
Slope

OHIO

Fairfield  
Hancock  
Putnam

OKLAHOMA

Beaver  
Harmon  
Major  
Woods





TEXAS

Andrews	Johnson
Aransas	Kaufman
Archer	Kendall
Armstrong	Kenedy
Bailey	Kerr
Bandera	Lamar
Baylor	Lampasas
Bell	Llano
Blanco	Loving
Borden	McCulloch
Bosque	McMullen
Bowie	Mason
Briscoe	Menard
Castro	Mills
	Navarro
Clay	Ochiltree
Coleman	Oldham
Collin	Palo Pinto
Collingsworth	Parmer
Colorado	Presidio
Concho	Randall
Coryell	Reagan
Crane	Reeves
Crockett	Refugio
Deaf Smith	Roberts
Denton	Rockwall
Donley	Runnels
Ector	Rusk
Edwards	San Saba
Ellis	Shackelford
Erath	Sherman
Fort Bend	Somervell
Garza	Stephens
Gillespie	Sterling
Glasscock	Sutton
Gray	Throckmorton
Gregg	Uvalde
Hall	Van Zandt
Hansford	Wheeler
Harrison	Winkler
Hartley	Wise
Hood	Wood
Hopkins	Yoakum
Jack	Young

VIRGINIA

Alleghany	King William
Augusta	Lancaster
Bedford	Loudoun
Botetourt	Mathews
Campbell	
Chesterfield	New Kent
Clarke	Orange
Culpeper	Prince George
Fauquier	Pulaski
Frederick	Rockingham
Hanover	Shenandoah
Henrico	Spotsylvania
James City	Stafford
King George	

Independent Cities

Colonial Heights

Covington

Fredericksburg

Harrisonburg

Petersburg

Radford

Staunton

Winchester

WISCONSIN

Green Lake

Jefferson

Walworth



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

ARS FOOD AND NUTRITION PROGRAMS

Talk by Dr. George W. Irving, Jr.,  
Administrator, Agricultural Research Service, USDA,  
at the 1970 National Agricultural Outlook Conference,  
in panel discussion on implications for agricultural programs  
of recommendations of White House Conference on Food, Nutrition,  
and Health, Washington, D.C., 10:15 A.M., Tuesday, Feb. 17, 1970

The recent White House Conference on Food, Nutrition, and Health and their recommendations, have given new emphasis to the Department of Agriculture's programs in food and nutrition. I welcome this emphasis, and hope that it may mean an increasing concentration of effort in a basic area that touches every human life.

Food and nutrition research is not new to the Department. USDA's long history of research in this field began with Wilbur O. Atwater, who became the first chief of nutrition research in 1894 when Congress appropriated the first funds for this effort.

Through the years, the research initiated by Atwater developed rapidly along many lines and many noteworthy contributions were made. These include the tables of food composition and nutritional requirements that are now classic in the field of food and nutrition . . . guidance materials such as the Daily Food Guide and Food Plans at Different Cost Levels . . . the Type A lunch pattern . . . surveys of household food consumption . . . and guidance on food preparation, including procedures for home canning and freezing.

The Agricultural Research Service intends to strengthen the research that supplies the information for these guidance materials, as well as the surveys and other studies needed to improve them.

The results of this work are being used in two ways: (1) as the basis for educational programs aimed directly at helping the individuals who need help and (2) as the guidelines for developing and conducting food programs such as the school lunch and food stamp plans and fortification and enrichment of food.



In one of their major recommendations, the Conference participants asked for a reappraisal of priorities in Federal research expenditures to expand research on supplies of traditional foods and their nutrient content. The Agricultural Research Planning Advisory Committee (ARPAC) recommended a similar course of action last July.

In response to this proposal by ARPAC, ARS initiated a study that got underway in mid-September. The purpose is to find objective ways of measuring the benefits of good nutrition to help provide a sound basis for making decisions on the best use of the Nation's scientific resources.

Specifically, the study involves:

(1) identifying and classifying the most important nutritionally oriented food and health problems in a "state-of-the-art: analysis,

(2) determining the potential benefits -- including social and economic values such as length of life, productivity, and well-being -- from food and nutrition research and action programs,

(3) developing proposed programs of research and related activities and estimating costs, and

(4) balancing the costs against the benefits to be derived from the research as a basis for making decisions on priorities.

Information for this study was gathered from all agencies throughout the country involved in human nutrition research -- from States, foundations, industry, and Federal Government. A preliminary report on the findings is expected by June 1. This extensive review will provide us with the material we need in reappraising the priorities in food and nutrition research. Such a reappraisal, we feel confident, will result in more resources being devoted to improving the nutrition of our people.

Conference delegates called for an expansion of research on food composition, and also on identifying the nutrient changes that take place at different stages in the distribution system.

Nutritionists and food experts in ARS provide the standard tables on the nutritive value of foods used throughout the country. We know these tables need to be expanded. We are trying to expand them as rapidly as resources will allow, and as basic laboratory values become available. Last year, for example, we published some new tables on the B<sub>6</sub>, B<sub>12</sub>, and pantothenic acid content of some 500 foods. A small increase in funds was provided this year to study the effects of processing on these nutrients.

We are aware of the need for determining the nutritive value of new products along with other attributes of quality. Our Utilization Divisions are putting increased emphasis on determining nutritive value in their evaluations of the new products and processes they develop.



Nutritive value is more and more a major consideration in the development of new strains and varieties of crops. As plant scientists breed plants for certain desirable characteristics, they make certain that the added traits are not gained at the expense of nutritive value.

One example of our concern about nutritive value in crops is high-lysine corn. This corn has special amino acid value but lacks most of the desirable traits of standard varieties. It produces low yields, lacks disease and insect resistance and drought tolerance, and is relatively unresponsive to fertilizers. Plant scientists are devoting much effort to transferring the increased nutritive value of the high-lysine corn into standard varieties that have all the other desired characteristics.

Animal scientists are also interested in nutritive value, along with other characteristics, as they work to produce improved livestock and livestock products. In general, the tendency is to breed for decreased waste fat, thus enabling consumers to get a meat product with a higher yield of protein. Continuous selection over a period of time produced the successful lean-meat-type hog that most of you are familiar with. Tests are now underway to see how successfully we can do the same thing with beef cattle.

Although we are striving continually to improve it, livestock production is by no means as inefficient, all things considered, as many make it out to be. We are confident that animal foods, with their high quality protein, will continue to contribute to a nutritionally adequate diet for a long time to come.

The White House Conference delegates expressed deep concern about the problem of pesticide residues in food and asked for expanded studies to develop pest control methods that do not utilize chemicals.

Two things seem clear in the current pesticide situation: (1) the use of the more persistent pesticides, including their use on food crops, will decline in the near future but, (2) many chemicals will continue to be needed and used in the foreseeable future, and these will be mostly the less persistent, more specific types such as the carbamates and organophosphates, which have some problems of their own.

So the need for alternate methods of pest control is more and more urgent. ARS has long been conducting a strong, in-depth research program that emphasizes pest control without chemicals, or with only minimal amounts. Some of the newer techniques include sterilized insects, biological agents, natural and synthetic sex attractants, light, sound, and various mechanical and cultural techniques. They can be used singly, or in combination in an integrated control approach covering a wide geographical area.

The overall problem of making sure that our food supply is safe, is being met not only through research . . . but also through the activities of the regulatory, monitoring, and educational programs that ARS administers.





Regulatory activities are aimed at keeping out foreign plant and animal pests and controlling outbreaks should they get in . . . monitoring operations involve keeping a constant check on levels of pesticides in the environment . . . and educational programs are aimed at teaching farmers and home gardeners how to use pesticides safely.

Now, turning to the question of fortification of foods, which Conference officials felt should be expanded, I have several points to make.

ARS dietary studies are being used as a basis for estimating the effects of enrichment of bread and flour. The Utilization laboratories are investigating the technical problems of fortifying milk and other foods with iron, and nutritionists are studying the biological effectiveness of different forms of iron on humans. We have asked the Food and Nutrition Board of the National Academy of Sciences to review the whole problem of food fortification with iron, and to make recommendations. The Board appointed a special subcommittee for this purpose. This group has already met three times during the past few months.

The White House Conference recommended more frequent surveys of food consumption. ARS is now planning another household food consumption survey for 1972, and is coordinating research with the nutritionists in the Department of Health, Education, and Welfare who are charged with a monitoring and surveillance program on nutritional status. If the survey materializes as planned, it will be seven years after the last one, not quite the goal of five as recommended by one of the Conference panels.

A major use of the food consumption surveys is in the development of the Family Food Plans at different cost levels. ARS nutritionists first developed these plans to help families make the best use of limited budgets. They are now used extensively in determining the cost of a nutritionally adequate diet in public programs. The least expensive of these, the economy plan, is used in administering the food stamp program.

ARS is currently reviewing these plans, and is expecting to bring in outside experts for advice and consultation. In the meantime, our quarterly publication, Family Economics Review, will continue to publish the cost of the low-cost, moderate-cost, and liberal food plans, updated for changes in food prices. Once a year, up-dated cost estimates for these plans are published for four regions.

Various food assistance and Extension programs are especially important at this time. The ARS research backstopping for these programs is essential to their success. Much of this research is conducted by our Consumer and Food Economics Research Division. Through this division, ARS provides assistance on the school lunch program and food preparation for needy families. It continuously reviews the nutritional basis for the Type A lunch pattern, and recommends food standards in domestic and foreign food purchase programs, and in the special food distribution plan for needy mothers and their infants.



ARS, through the Consumer and Food Economics Research Division, also participates in evaluating the effectiveness of the Expanded Food and Nutrition Program sponsored by the Federal Extension Service. This, as you know, is the program that utilizes nonprofessional aides in working with low-income families to help them develop better nutrition habits. ARS helps prepare the materials for the aides and home economists to use in this effort, which, from all reports, is progressing very satisfactorily.

For many years, ARS has taken overall administrative responsibility for the Interagency Committee on Nutrition Education. This committee, which has been in existence since the days of the War Food Administration, has provided an effective forum for the exchange of information about nutrition education activities of all Federal agencies doing work in this field. This has enabled the agencies to make consistent policy statements on nutrition education.

This particular activity is aided by our bimonthly publication, Nutrition Program News. The magazine provides a medium for reaching nutrition workers throughout the country. It supplies information on new programs, the dietary situation, and successful programs at the local level.

Of course, there is much more that we should be doing than we are now. Our scientists and administrators tell me that whenever they have a chance . . . and I listen to them.

But it is no simple matter to accomplish what must be done with limited resources. We in ARS know this . . . the Secretary knows this . . . and the President knows it. Our hope is that the results and recommendations of the White House Conference will marshal interest to such an extent that there will be strong positive support for programs in nutrition.

ARS scientists and technologists have made important contributions in helping to formulate and implement a new national food and nutrition policy. I know they will continue to contribute their energy and creative talents to this cause.



Summary of a Speech by  
Edwin L. Kirby, Administrator, Federal Extension Service  
U.S. Department of Agriculture  
at the  
National Agricultural Outlook Conference  
Washington, D. C.

February 17, 1970

Edwin L. Kirby, Administrator of USDA's Federal Extension Service, told a National Agricultural Outlook Conference February 17 that the Extension Service is meeting challenges of a recent White House Conference to improve the nutrition of low-income families.

Extension's expanded nutrition education program that was started early in 1969 already has reached more than 300,000 families and will be working with about half a million by the end of this fiscal year. All 50 States, District of Columbia, Puerto Rico, and the Virgin Islands have adopted this program and have hired more than 5,000 aides from the poor communities to work with hard-to-reach homemakers.

By July 1, this program is scheduled to be operating in more than 1,000 counties, cities, and Indian reservations. Extension has the capacity to conduct effective food and nutrition educational programs in every county and community in the U.S., Administrator Kirby said. As additional resources are made available to Extension, we will expand the use of program aides selected from low-income families and trained to provide educational assistance to their neighbors.



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UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR WHEAT

Talk by William R. Askew  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 3:30 P.M., Wednesday, February 18, 1970

Extensive farmer use of the loan program and anticipation of gains in exports brighten wheat price prospects, despite indications of a rise in the carryover again this summer.

The wheat supply for the 1969/70 marketing year was up some 160 million bushels from a year earlier. Total disappearance in July-December 1969 at 752 million bushels was down slightly. Stocks on January 1 totaled 1,527 million bushels, around 180 million above a year earlier.

January 1 "free" or privately held stocks totaled 653 million bushels, down 55 million from January 1969. These smaller "free" stocks together with an anticipated increase in disappearance during January-June 1970, relative to a year ago, point to somewhat more price strength than the \$1.28 per bushel average farm price of January-May 1969.

Exports of all wheat in 1969/70 are expected to total around 600 million bushels, some 10% above last year's outgo. This prospect is based on improved exports to Japan, more competitive U.S. export prices, and somewhat reduced competition in spring wheats from the USSR and Australia the rest of this year.

The anticipated wider spread between wheat prices and prices of most feed grains during the rest of the year will sharply reduce wheat feeding from the high level of July-December 1969. The total for 1969/70 may be around 200 million bushels, compared with 172 million last season. Farmers fed over 165 million bushels in July-December 1969, virtually the same as a year earlier, even though wheat prices were more depressed. Food and seed usage may change little from 1968/69.

Production of winter wheat in the United States in 1970 was estimated at 1,030 million bushels as of last December 1. At this level the crop would be off 118 million bushels from 1969. Soft red wheat production in 1970 may total around 170 to 180 million bushels; 1969 production was 195 million.

The 1970 Wheat Program is virtually the same as in 1969 but the acreage allotment at 45.5 million acres is 6.1 million smaller than in 1969. The voluntary acreage diversion program for payment and the marketing certificate payments are also continued.





World wheat supplies continue heavy. Even with some expansion in world trade from last year's low level, they may increase further. But world wheat prices have stabilized and are likely to at least hold at current levels.

Exports of the various classes of wheat (grain only) this year have followed a mixed pattern. The most notable change from last year is the 46% reduction in exports of soft red winter. Hard red spring exports are up 10% while durum is off by the same percent. Hard red winter exports are off slightly while white wheat exports are down 12%.

Most hard spring and durum exports have been under commercial terms while hard winter and white wheat have relied heavily on PL 480 authorizations. About half the soft red sales have been for dollars with most of the remainder moving under Title I of PL 480.

Japan in July-December 1969 was the major dollar purchaser and also the biggest individual buyer of wheat. Traditionally, India is the leading taker. This year India fell to 2nd place trailed by Brazil and Korea.

After registering a substantial rise at most markets during the fall, wheat prices began to level in January. The price support loan remains the basic factor maintaining hard winter and white wheat prices, although the recent pickup in exports has added support. Exports are primarily responsible for price strength in hard spring and durum wheat, with the loan program helping.

However, in soft red wheat prices it is more difficult to single out any one factor as the basic source of strength. We know that (1) exports are not responsible and (2) the loan program is not a particular factor. Thus, domestic disappearance has likely been heavy. Domestic disappearance of soft red winter wheat may total as much as 175 million bushels during the entire marketing year; last year it totaled 171 million. Apparent heavy domestic use along with the largest quantity controlled by CCC in several years (it owned 12.2 million bushels on December 31 and held another 2 million in the warehouse' resale program) have created a tightness in the market.

Based on July-December exports, plus prospects for January-June, and the levels of domestic disappearance shown in table 2, the June carryovers of the various classes of wheat might range as follows:

Item	June 30	
	1969	1970
	- - Million bushels - -	
Hard red winter	547	640-660
Soft red winter	33	20-25
Hard red spring	140	95-105
Durum	41	65-75
White	58	50-60
Total	819	899



Table 1.--Wheat: Supply, distribution and prices,  
average 1964-66 and annual 1966-69

Item	Year beginning July				
	Average 1964-66	1966	1967	1968 1/	1969 Projected
-- Million bushels --					
Supply					
Beginning carryover	643.6	535.2	425.0	539.4	819
Production	1,401.9	1,311.7	1,522.4	1,576.2	1,459
Imports 2/	1.2	1.7	.9	1.1	1
Total supply	2,046.7	1,848.6	1,948.3	2,116.7	2,279
Domestic disappearance					
Food 3/	513.1	501.9	519.2	519.8	525
Seed	67.8	78.4	71.5	61.6	55
Industry	.1	.1	.1	.1	---
Feed (residual) 4/	110.2	98.9	57.0	172.5	200
On farms where grown	(40.1)	(26.1)	(42.9)	(58.6)	
Total	691.2	679.3	647.8	754.0	780
Available for Export and Carryover	1,355.5	1,169.3	1,300.5	1,362.7	1,499
Exports 2/	728.4	744.3	761.1	544.1	600
Commercial, incl. barter	(322.6)	(438.8)	(306.9)	(293.2)	
Total disappearance	1,419.6	1,423.6	1,408.9	1,298.1	1,380
Ending carryover	627.1	425.0	539.4	818.6	899
Privately owned--"Free"	(194.5)	(223.7)	(216.2)	(202.9)	
-- Dollars per bushel --					
Price Support					
National average loan rate	1.26	1.25	1.25	1.25	1.25
Average certificate payment	.50	.59	.48	.55	.65
Season Average Price Received					
By non-participants	1.39	1.53	1.39	1.24	1.23
By program participants	1.89	2.22	1.87	1.79	1.88

1/ Preliminary.

2/ Imports and exports are of wheat, including flour and other products in terms of wheat.

3/ Used for food in the United States and U.S. territories, and by the military both at home and abroad.

4/ Assumed to roughly approximate total amount used for feed, including amount used in mixed and processed feed.



Table 2.--Wheat: Estimated supply and distribution by classes, United States, average 1964-68, annual 1968/69 and Jan. 1, 1970 availability

Item	Hard winter	Red winter	Hard spring	Durum	White	Total
	- - - - Million bushels - - - -					
<u>Average 1964-68</u>						
Carryover, July 1	411	13	161	43	16	644
Production	700	225	205	73	199	1,402
Imports 1/	---	---	1	---	---	1
Supply	1,111	238	367	116	215	2,037
Domestic disappearance 2/	302	147	138	39	65	692
Available for export or carryover	809	91	229	77	149	1,355
Exports 1/	422	73	76	34	123	728
Carryover, June 30	387	18	153	43	26	627
<u>1968/69 3/</u>						
Carryover, July 1, 1968	328	30	129	24	28	539
Production	811	224	228	100	214	1,577
Imports 1/	---	---	1	---	---	1
Supply	1,139	254	358	124	242	2,117
Domestic disappearance 2/	324	171	138	37	84	754
Available for export or carryover	815	83	220	87	158	1,363
Exports 1/	268	50	80	46	100	544
Carryover, June 30, 1969	547	33	140	41	58	819
<u>1969/70 (Projected)</u>						
Carryover, July 1, 1969	547	33	140	41	58	819
Production	789	195	187	107	181	1,459
Imports 1/	---	---	1	---	---	1
Supply	1,336	228	328	148	239	2,279
Domestic disappearance 2/	335	175	145	35	90	780
Exports, July-December 1/	150	15	47	21	47	280
Available for export or carryover, Jan. 1, 1970	851	38	136	92	102	1,219

1/ Imports and exports are of wheat, including flour and other products in terms of wheat.

2/ Wheat used for food (in the United States and U.S. territories, and by the military both at home and abroad), feed, seed and industry.

3/ Preliminary.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR RICE

By William R. Askew  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., Wednesday, February 18, 1970

The U.S. rice supply in 1969/70 was off slightly from last year's record 111 million hundredweight (see table). The large August 1, 1969, carryover was offset by a smaller crop.

Domestic disappearance in 1969/70 is expected to be about the same as last year's 35.5 million cwt. and food use is also expected to be about unchanged. Seed use will be off, reflecting the smaller 1970 acreage allotment while brewer's use may be up somewhat (see table).

Through December 1969 exports were running 18% ahead of a year earlier. It is unlikely that they will maintain this pace since U.S. exports are facing a record world crop and large stocks in many countries.

Should exports approximate the 1968/69 total of 56.2 million cwt. the carryover on August 1, 1970, would be slightly smaller than that of last summer.

World rice production for 1969/70 (August-July), excluding Communist Asia, is forecast at 195 million metric tons in the first estimate by the Foreign Agricultural Service. This is 5% above last year's record crop and is the third consecutive year of increased production.

World acreage in rice is forecast at 244 million acres, less than 1% above last year's record. The Asian countries indicate the largest increase, with smaller gains in Africa and Europe. Both North and South America show declines from last year but are still well above their 1963-67 average. Yield per acre also is forecast at a record level, almost 10% above the 1963-67 average of 1,610 pounds per acre.

Total production in Asia -- the major producing area -- in 1969/70 is forecast 5% over last year's previous high. Four of the five largest producers in Asia -- India, Pakistan, Indonesia, and Thailand -- are expecting record 1969/70 crops. If the anticipated production materializes, it will result mainly from improved yields. The production estimate for Japan, the other main producer, is only 3% less than the record crops of the last 2 years.





North American production decreased 14% this year. The decline is mainly attributable to reduced acreage and lower yields in the United States and Mexico.

European production was up nearly 19% from the previous year's, with Italy accounting for most of the increase. The gain of one-third in Italian production was the result of a 10% increase in area and higher yield due to better growing conditions.

The outlook for the South American crop, much of which will be harvested in 1970, is for a slight decline from last year. Production is expected to be down slightly in Argentina and Colombia and up in Brazil and Peru.

Total African production again set a record as output was 3% above last year's previous high. Crops increased in the UAR, Senegal, and Morocco, with no significant declines in any of the African countries.

Australia continued to expand its rice production and is expected to record its ninth consecutive record harvest in 1969/70 as a result of a 15% increase in acreage.

The 1970 national acreage allotment was set at 1,836,461 acres. Producers approved marketing quotas for 1970 by a 90.3% favorable vote. Price support at national average of \$4.81 per cwt. will be available to growers who comply with the acreage allotment.

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The next Rice Situation summary will be released on March 19.



Rice, rough equivalent: Supply and distribution and prices,  
United States, average 1959-63, annual 1965-69 1/

Item	Year beginning August					
	1959-63 average	1965	1966	1967	1968 2/	1969 2/
	- - - - Million cwt. - - - -					
<u>Supply</u>						
Carryover August 1	10.2	7.7	8.2	8.5	6.8	16.2
Production	59.8	76.3	85.1	89.4	104.1	91.3
Imports	.3	.7	3/	3/	3/	3/
Total supply	70.3	84.7	93.3	97.9	110.9	107.5
<u>Domestic disappearance</u>						
Food 4/	21.4	23.5	23.9	25.0	27.0	27.0
Seed	2.3	2.7	2.7	3.2	2.9	2.5
Used by brewers	4.5	4.7	5.3	5.4	5.8	6.0
Total	28.2	30.9	31.9	33.6	35.7	35.5
<u>Available for export and carryover</u>	42.1	53.8	61.4	64.3	75.2	72.0
<u>Total exports</u>	33.0	43.3	51.6	56.9	56.2	
For dollars	(15.1)	(27.1)	(29.6)	(34.7)	(25.7)	
Total disappearance	61.2	74.2	83.5	90.5	91.9	
<u>Carryover July 31</u>	8.6	8.2	8.5	6.8	16.2	
Privately owned--"Free"	(5.7)	(7.6)	(8.3)	(6.7)	(9.9)	
Total distribution	69.8	82.4	92.0	97.3	108.9	
<u>Difference unaccounted 5/</u>	+5	+2.3	+1.3	+6	+2.8	
	- - - - Dollars per cwt. - - - -					
<u>Price Support</u>						
National average loan rate	4.59	4.50	4.50	4.55	4.60	4.72
<u>Price Received by farmers</u>						
Season average	4.87	4.93	4.95	4.97	5.00	4.92
<u>Farm price above support</u>	.28	.43	.45	.42	.40	.20

1/ Data apply to only major rice-producing States. Milled rice converted to rough basis at annual extraction rate. 2/ Preliminary. 3/ Less than 50,000 cwt. 4/ Includes shipments to U.S. territories and rice for military food use at home and abroad. 5/ Results from loss, waste, the variation in conversion factors, the lack of data on other uses and the different crop years for the two rice areas.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR POULTRY AND EGGS

Talk by William E. Cathcart  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 1:45 P.M., Wednesday, February 18, 1970

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The past year was good to the poultry industry. Egg production in 1969 was down slightly but prices rose to their highest levels since the early 1950's. Broiler meat production last year was up more than 9 percent but prices remained above year earlier levels. Turkey production was about the same as in 1968 but cold storage holdings were large. However, strong demand sharply reduced stocks and prices averaged above 1968.

Cash receipts from marketings of poultry and eggs rose 15 percent in 1969. Another increase is likely in 1970 but by a smaller amount. An increased volume probably will more than offset an expected reduction in average prices.

Higher prices for poultry and eggs in 1969 were primarily the result of unusually strong consumer demand, increased incomes, and relatively high prices for red meats. The price rise for eggs also reflected smaller egg supplies during the first 6 months of 1969.

The cost of producing poultry and eggs this year will likely rise. Feed costs and chick and poult costs may be slightly higher. Costs of most other items of production, such as labor, supplies and equipment will likely increase but at a slower rate than in 1969. Thus, if prices received by producers average near or slightly below a year earlier, net returns per unit of production will be lower.



Combined poultry and red meat consumption in 1969 totaled about 230 pounds per person, about 2 pounds more than in 1968. Consumption of chicken at 39 pounds was up 2 pounds from 1968 and turkey was up slightly. Per capita beef consumption was up 1 pound but total red meat consumption--beef, pork, veal and lamb--was down 1 pound per capita.

Output of eggs, broilers, and turkeys is expected to increase in 1970. Prices likely will weaken some and for the year may average below 1969. Most of the price weakness probably will occur during the last half of 1970, based on expected increases in production.

### Eggs

With near-normal culling, the laying flock is expected to continue above 1969 levels at least through the first half of 1970 and perhaps beyond if early intentions continue.

On January 1, the number of hens and pullets of laying age totaled 325.7 million--up 3 percent from January 1969. Also, the number of pullets 3 months old and older not yet laying was up 5 percent. The rate of lay was up over 1 percent. In addition, the October-December 1969 egg-type chick hatch for replacements in laying flocks during the second quarter of 1970 averaged about 3 percent above the previous year.

The larger laying flock and a continuation of the higher rate of lay may increase egg output around 3 percent in the first half of 1970 over the same period of 1969. In the last half, the size of the laying flock and egg production largely depends on the size of the egg-type chick hatch during January-June 1970. Early indications and relatively favorable prices suggest that the hatch will be up substantially. Egg-type chicken eggs in incubators on January 1 were up 27 percent. Also, the egg-type chick hatch in California, Georgia, Illinois, and Washington during January was over 25 percent above January 1969. If the chick hatch continues substantially above a year earlier, without a corresponding increase in the culling of old flocks, production would be up sharply in the second half of 1970.

Prices received by producers in January 1970 averaged 53.1 cents a dozen, down 1.5 cents from December but 10.1 cents above January 1969. Although declining seasonally, prices for the first half of 1970 likely will remain above a year earlier, but the difference is expected to narrow.

Increased use, by egg breakers to supply current needs and to replenish inventories and by hatcheries for larger hatchings of both egg-type and broiler-type chicks, may limit per capita supplies of shell eggs for table use in the first half of 1970 to about the year earlier levels. Thus prospects for rising incomes and continued strong consumer demand likely will hold egg prices above the first half of 1969. General demand expansion is expected to continue in the last half of 1970 but supplies of competing foods will likely increase. If producers add to the laying flock, as seems likely based on recent increases in hatchery activity, prices in the second half probably will average below the relatively high prices a year earlier, particularly in the closing months of the year.





## Broilers

Broiler meat output in Federally inspected processing plants last year totaled 6.5 billion pounds, ready-to-cook weight, 9 percent more than in 1968. Marketings totaled more than  $2\frac{1}{2}$  billion birds, 8 percent above 1968 and the average liveweight rose 1 percent. The number of broilers raised and the average liveweight have trended upward in recent years. Broilers raised during the past 10 years expanded at an annual average rate of 5 percent--94 million broilers per year. For this same period the average liveweight of broilers marketed increased by 1 percent a year. Production increased each year during this period and current indications point to continued expansion in 1970.

The broiler hatchery supply flock continues to expand. The number of pullets placed quarterly for broiler hatchery supply flock has continued above year-earlier levels since the second quarter of 1968. This buildup could support a substantial increase in broiler production this year.

In response to favorable broiler prices during the past year, producers will likely continue to increase production in 1970. The historical relationships between the ratio of feed and chick costs to broiler prices and production of broilers in the following year would suggest an increase this year in the range of 5 to 10 percent. Based on broiler chick placements, supplies for January-March will average around 13 percent above those months of 1969. Output likely will continue above year-earlier levels through all of 1970; though the margin may narrow during the year.

Last year the unusually strong consumer demand for meat kept broiler prices above year earlier levels despite a 9 percent increase in broiler meat and continued large supplies of red meats. Prices for broilers during 1970 may average below 1969 because of larger output and perhaps a slower expansion of demand in 1970. However, continued strong consumer demand for meats and prospects for little change in red meat supplies will tend to maintain the demand for poultry.

Broiler prices (wholesale ready-to-cook in 9 cities) in the last quarter of 1969 averaged 27.5 cents a pound, about 2 cents above a year earlier. Although prices increased from the seasonal lows of December and averaged 28.6 cents during January, they were more than 1 cent per pound above a year earlier. Prices are expected to fall below 1969 by spring and likely will average below a year earlier in the second half of 1970.

## Turkeys

Turkey production this year probably will increase moderately from the 105 million raised in 1969. Higher turkey prices in 1969 more than offset higher feed costs, resulting in an increase in the profitability ratio. The historical relationship between the ratio of feed and poult costs to turkey prices and the change in production the following year indicate a moderate increase in 1970 turkey production.

Cold storage stocks on January 1 totaled 203 million pounds, a third less than a year earlier and 45 percent below the high level of January 1, 1968. Large cold storage stocks this time last year were a price depressing factor.



Turkey producers indicated plans as of January 1 to raise about 112 million turkeys--5 percent more than in 1969. Most of the planned increase is for heavy bread birds, only 1 percent more for light breeds.

There were slightly fewer turkey poults hatched during September-November 1969 than a year earlier. However, poult production in December was up 29 percent; and weekly turkey hatch (reports for 10 States) during January indicate a 32 percent increase. But the relative size of the 1970 turkey crop will depend largely on the increase in poult production during the seasonally heavy March-July period. These months usually account for about three-fourths of annual poult production.

Turkey prices were depressed during the first half of 1969 by large cold storage stocks. Live turkey prices trended upward from the seasonal low of 19.6 cents for February to 25.6 cents for December and for the year averaged about 1 cent above 1968.

Turkey prices for the first half of this year likely will average well above a year earlier. Prices in the last half of 1970 may average lower. Until June 1970,--when supplies normally are seasonally light--Turkey meat supplies will continue below a year earlier because of substantially smaller beginning stocks. A substantial increase in production for the last half may push producer prices below the 22.5 cents a pound received in the last half of 1969. Turkeys will face strong competition from larger broiler supplies this year and per capita red meat supplies will likely be increasing later this year. However, rising consumer incomes will continue to lend support to prices in 1970.

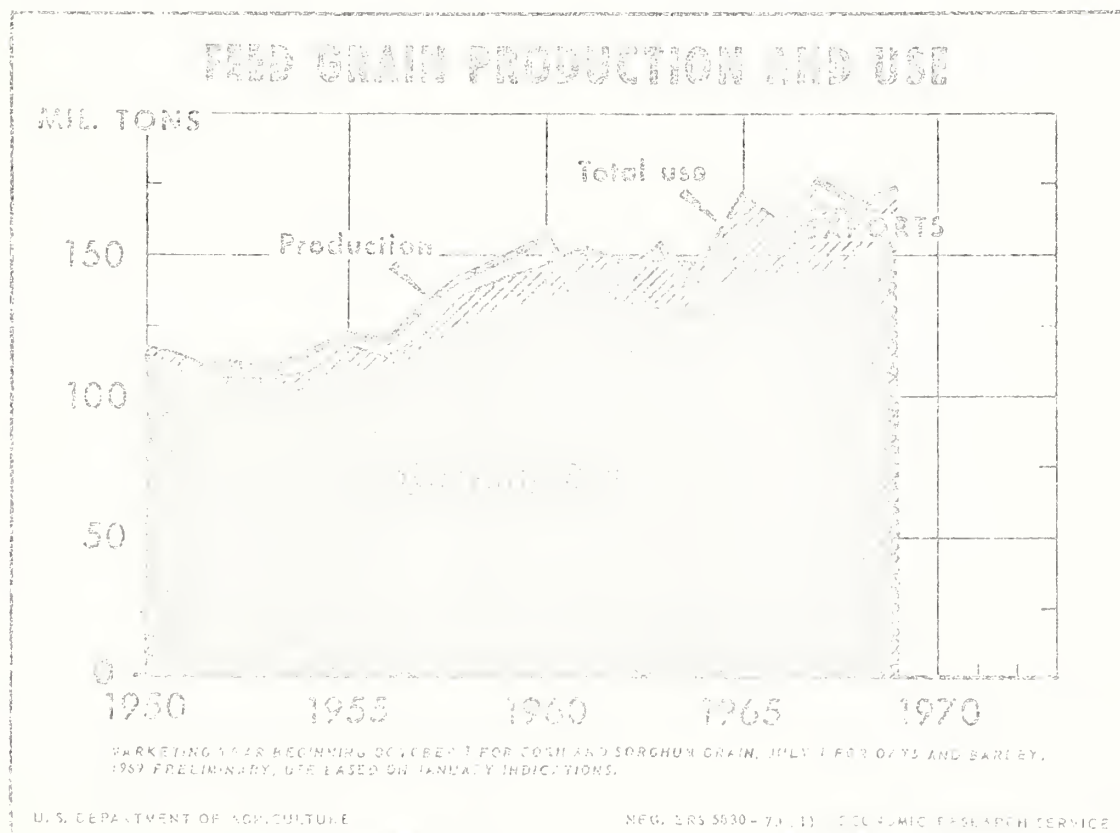


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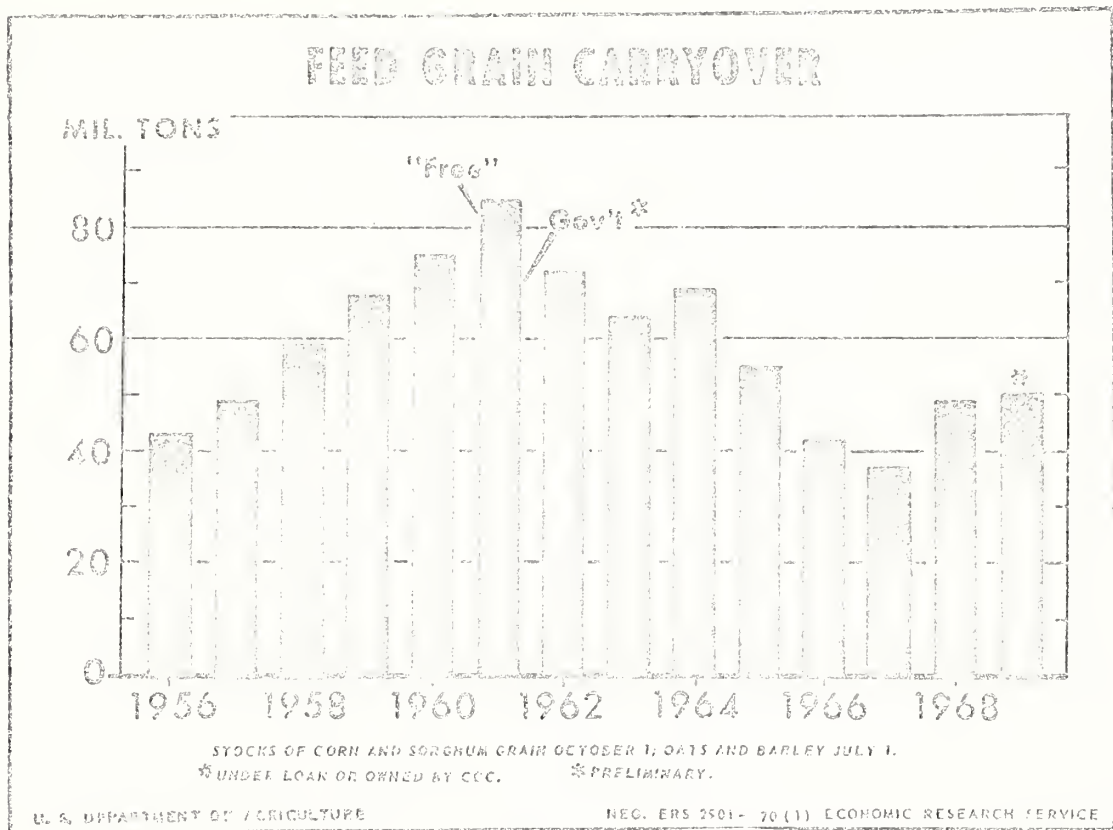
OUTLOOK FOR FEED

Talk by Malcolm Clough  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 2:00 P.M., Wednesday, February 18, 1970

Expanding feed grain consumption in 1969/70 is expected to about equal increased production, giving another year of fairly close balance between supplies and total requirements. The 1969 crop of 174 million tons was 5 million tons larger than in 1968 and close to the record crop of 1967. The anticipated increase in domestic consumption will come both through increased numbers of livestock to be fed (particularly poultry) and liberal feeding per animal. Exports may show little, if any, improvement; much still depends on the extent of competition from southern Hemisphere countries this spring and summer. The larger utilization in prospect would hold carryover into 1970/71 near the 50 million tons at the beginning of 1969/70.







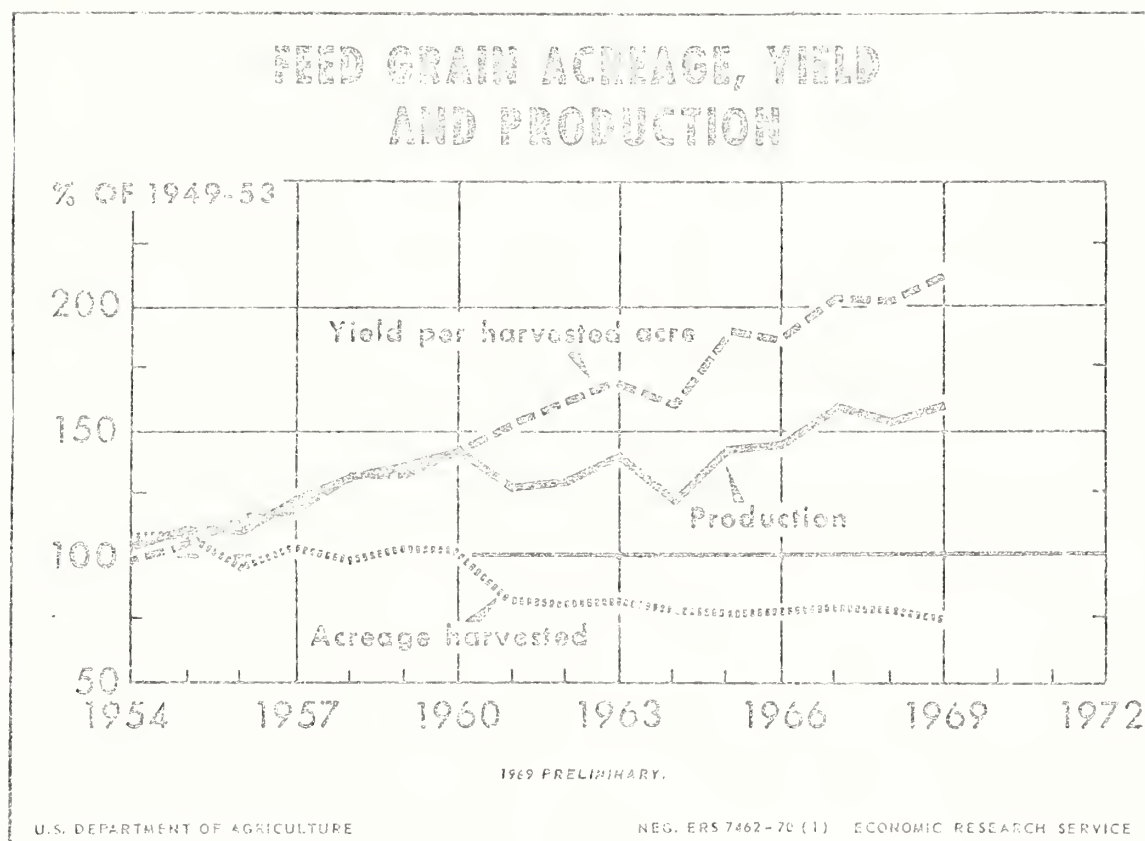
In recent years, total feed grain stocks have been well below the high level of 10 years ago, but "free" stocks have been larger. While "free" stocks at the close of 1969/70 probably will continue above the low levels of the early 1960's, they may be reduced further from the high level reached in 1967 and 1968. In those 2 years, large "free" carryover resulted in early seasonal price weaknesses for corn--during summer and early fall.

The 1970 Feed Grain Program, announced late in December, carries the same basic provisions as in 1969, although the acreage diversion payment will be based on 40% of the total price support times the projected yield per acre, compared with 45% last year. The goal of the program is to divert about 36 million acres from feed grain production, slightly below the total acreage diverted in 1969. Assuming the extent of participation in the program is about the same as it was last year, with a normal growing season the 1970 feed grain crop should again be in reasonable balance with the prospective larger requirements. This would be expected to maintain prices somewhere near the 1969/70 level.





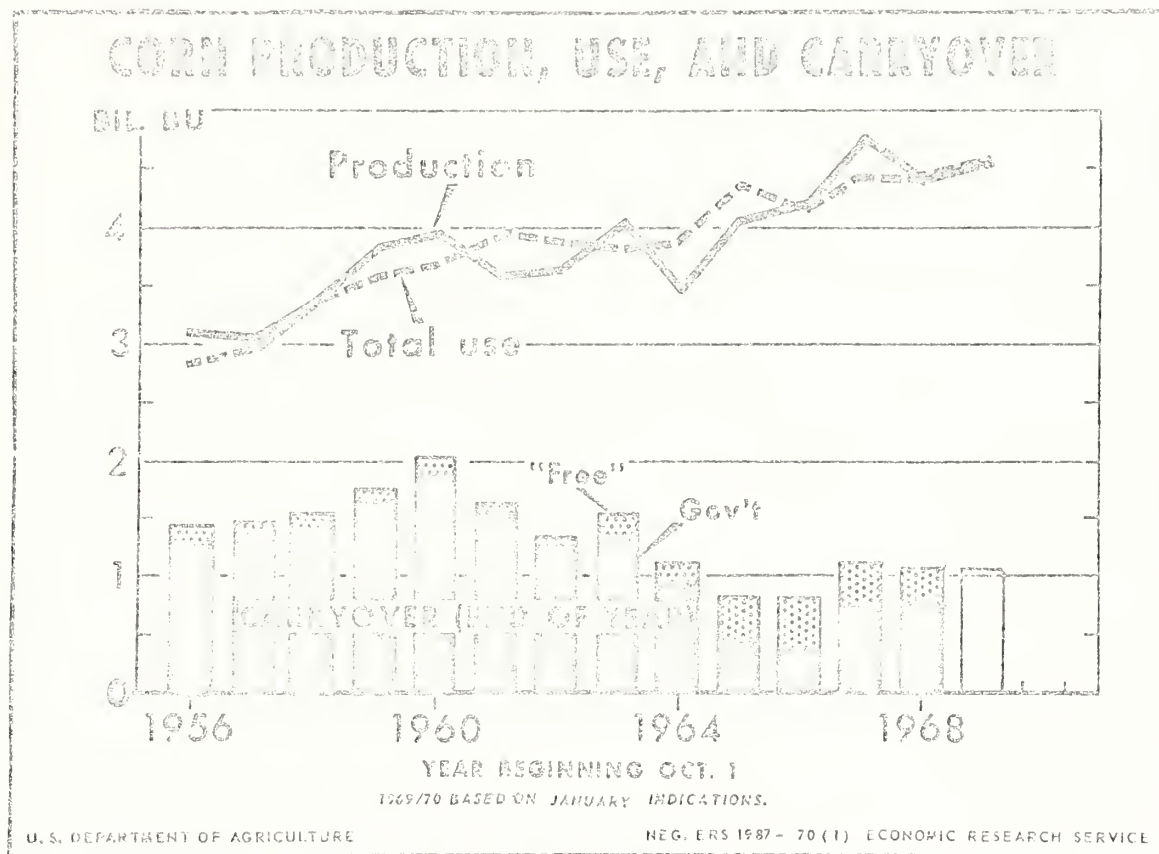
Steadily rising feed grain yields during the past 15 years have more than kept pace with expansion in domestic use and exports. The rise in feed grain yields, averaging nearly 6% annually since 1954, have made it possible to meet total requirements in recent years with 20 to 25% less acreage than in the early 1950's. The smaller acreage during the past 9 years has been accomplished through the diversion of 20 to 39 million acres of feed grains to soil-conserving purposes. The 1969 feed grain crop is expected to be about in balance with our total requirements with the harvested acreage about 25% below the acreage during the early 1950's.



Corn yields have more than doubled in the last 20 years, averaging nearly 84 bushels per acre in 1969. The 1969 crop of close to 4.6 billion bushels was second only to the record harvest in 1967. The acreage harvested was the smallest in more than 90 years. Including the carryover of 1.1 billion bushels, the 1969/70 supply totals about 5.7 billion bushels, 136 million more than last year and about equal to the previous record supply in 1960.

Total disappearance of corn during 1969/70 is expected to be 3 or 4% above the 4.4 billion bushels of 1968/69--about balancing 1969 production. Domestic

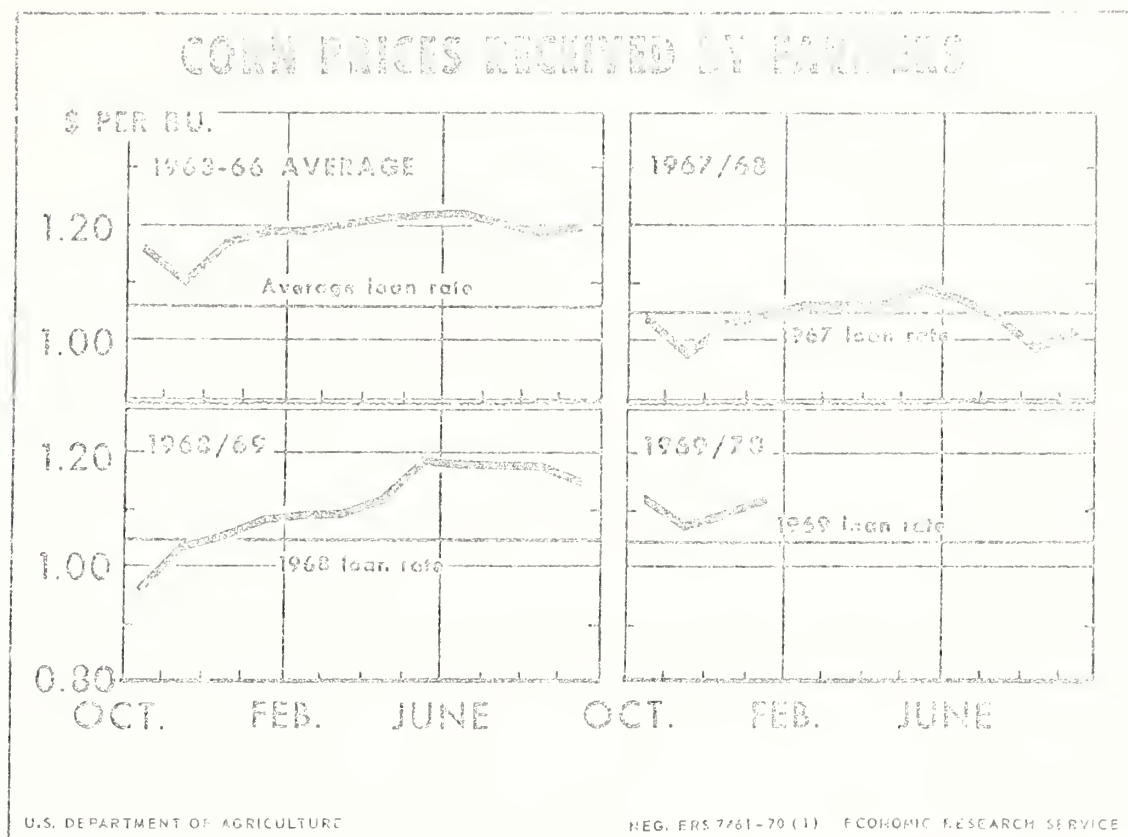




use during October-December was 2% above the high rate in that period last year. More poultry and increased cattle feeding are largely responsible for current heavy consumption. Increasing hog production and less competition from wheat will maintain heavy consumption in the last half of the marketing year. U.S. exports of corn have been well maintained in recent years, while much of the drop in our total feed grain exports has been in other grains. During October-December, corn exports totaled 186 million bushels, second only to the record movement in that quarter of 1965. Smaller exports are in prospect for the last half of the marketing year which could offset much of the gain in the first half. Based on present indications, total corn consumption will be in close balance with production, leaving carryover stocks again near the 1.1 billion bushels carried over at the beginning of the 1969/70 season.

Unlike the other 3 feed grains, grain sorghum production in 1969 probably will fall short of total use. The 1969 crop was practically the same as in 1968 but 15% over the 1963-67 average. While carryover also was near last year's level it has been reduced more than 50% over the past 5 years. The strong domestic demand for sorghum grain continued into 1969/70. More cattle on feed (especially in the Southwest and Far West) probably will boost feeding in 1969/70 around 10% over last year's record high. Even allowing for a moderate drop in exports, total disappearance is expected to be up by 50 million bushels to nearly 800 million. This would give a moderate reduction in carryover--probably below 250 million bushels--about half the 1963-67 average.





Big 1969/70 supplies of oats and barley are not being matched by increasing use. Even though prices have been comparatively low, domestic use of each of the 2 grains was only slightly higher during July-December this year than last. Exports have been practically nil--due to large supplies in both exporting and importing countries. Total disappearance is expected to be 5 to 10% over 1968/69, but it will fall short of the big crops of 1969. Carryover stocks which reached record levels on July 1, 1969, will expand further in 1970.

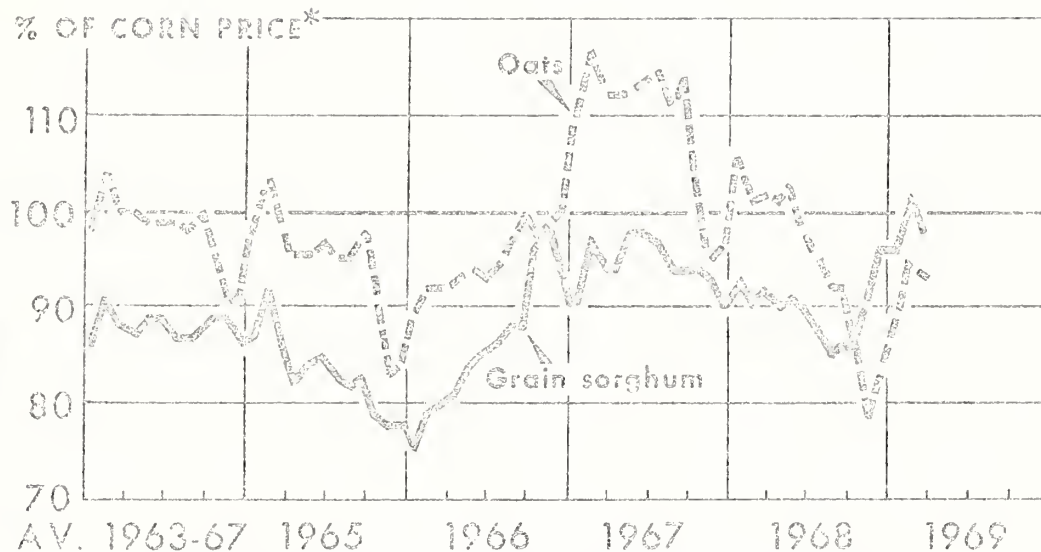
Corn prices have been a little higher this fall and winter than last and probably will average 7 or 8¢ above the loan of \$1.05 per bushel. This will make six out of the last seven years that corn prices have been above the loan rate. During 1963-66 when production was generally below requirements, there were only a few months (at harvesttime) when prices fell below the loan rates. They averaged about 12¢ above the loan for the four years.

The record crop harvested in 1967 brought prices 7¢ below the loan at harvesttime. They averaged 2¢ below for the marketing year. In 1968 production and total use were about in balance and prices rose more than seasonally, averaging a little above the loan rate. The strong demand for corn this year is expected to again bring total use in fairly close balance with production. While prices will average moderately higher than in 1968/69, the seasonal rise from fall to spring may not be as great as last year. However, prospects for the 1970 crop will have an important bearing on prices this spring and summer.



# OAT AND GRAIN SORGHUM PRICES

## In Relation to Corn



YEAR BEGINNING OCTOBER. AVERAGE MID-MONTH PRICES RECEIVED BY FARMERS.  
\*BASED ON PRICES FOR 100 POUNDS; NOT ADJUSTED FOR FEEDING VALUE.

U.S. DEPARTMENT OF AGRICULTURE

NEG. ERS 7464-70 (1) ECONOMIC RESEARCH SERVICE

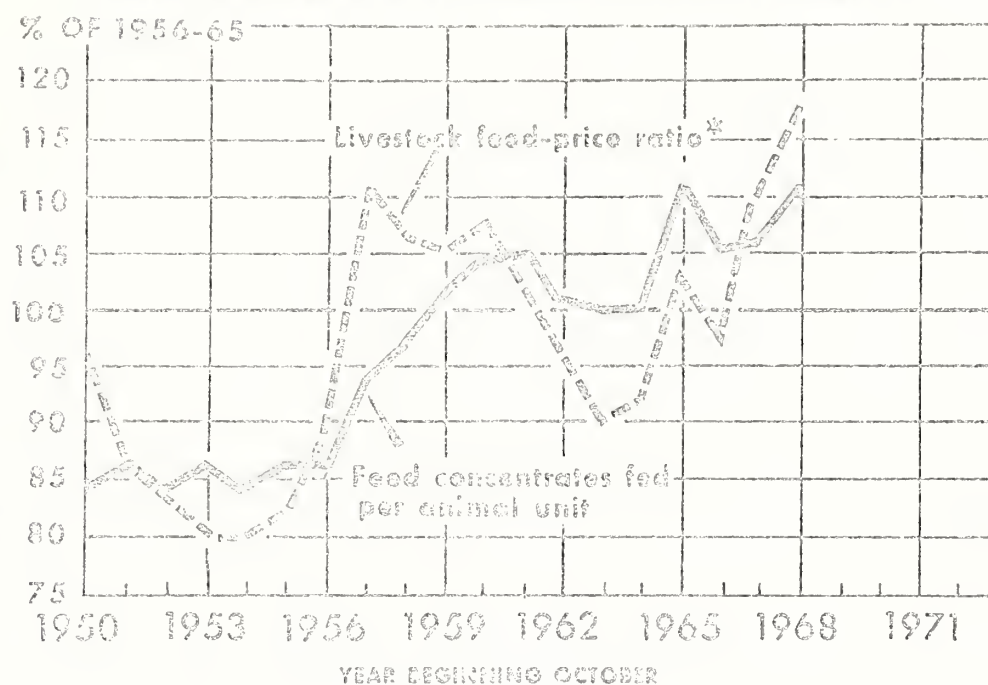
There have been wide variations among feed grain prices in recent years. The strong domestic demand for grain sorghums has boosted prices well above a year earlier this fall and winter, and around 30¢ per cwt. above the loan rate. They also have been higher than normal in relation to corn. During October-January, prices received by farmers for grain sorghum averaged 98% of corn, well above the 1963-67 average of 88%.

Oat and barley prices, on the other hand, have declined in recent years. Large supplies have not been balanced by increased consumption and prices have fallen much below the loan rates at harvesttime. The average price received by farmers for oats fell to 53¢ per bushel last summer, only 78% of the price of corn--the lowest in recent years. During July-December the price of oats averaged 87% of corn, down sharply from 2 years ago and much lower than in 1963-67 when the price of oats averaged about the same per 100 pounds as corn. Oat prices have advanced seasonally since last summer, but in January they still remained below the 5-year average in relation to corn.





## FEED-PRICE RATIO AND FEEDING RATE



\* LIVESTOCK PRICES AS RELATED TO FEED GRAINS AND HIGH-PROTEIN FEEDS.

U.S. DEPARTMENT OF AGRICULTURE

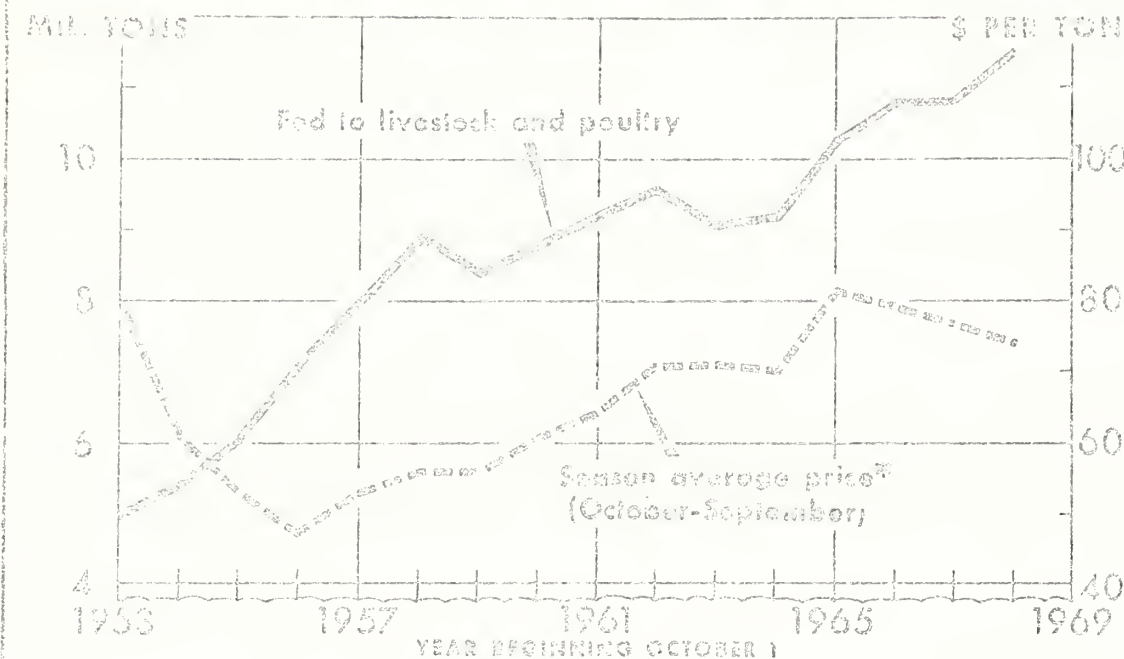
NEG. ERS 7086-70 (1) ECONOMIC RESEARCH SERVICE

The very favorable livestock/feed price ratios in 1968/69 contributed to the heavy feeding per animal unit--close to the previous record high of 1965/66. Livestock/feed price ratios are even more favorable this winter than last. The number of grain-consuming animal units to be fed is estimated at 185 million, 3 million more than last year. While hog production in the 1969/70 feeding year will be below a year earlier, this will be more than offset by increases in poultry and beef cattle. Present indications are for an increase of 4 or 5% in domestic feed grain consumption over the 149 million tons in 1968/69.

Feed grain exports have been heavy so far this year. The 6.1 million tons exported during October-December was 15% larger than in that quarter of 1968. But increased competition is in prospect from the Southern Hemisphere this spring and summer. Because of the continued favorable crop conditions in Argentina and South Africa, our export prospects are becoming less promising. Exports during April-September probably will be well below those of a year earlier.



# SOYBEAN MEAL FEEDING AND PRICES



\*WHOLESALE, BULK, 48 PERCENT PROTEIN, DECAYUR.

U. S. DEPARTMENT OF AGRICULTURE

REG. ERS 5394-70 (1) ECONOMIC RESEARCH SERVICE

The demand for high-protein feeds has been moving generally upward for a number of years. Favorable livestock/feed price ratios and an increase in high-protein-consuming livestock--particularly poultry--have created a strong demand for protein feeds this year. The total quantity of high-protein feeds consumed is now expected to be up about 4% to a record 19.3 million tons. With fish meal supplies down sharply and supplies of most other proteins limited, the increased demand will have to be met from increased soybean meal production. Soybean supplies are ample for 1969/70 requirements. With the current favorable margins, crushers are expected to continue to crush at near capacity. The total soybean meal tonnage fed will likely reach an alltime high of close to 13 million tons.

The strong demand for soybean meal this winter pushed the cash market price to over \$80 a ton in December and January. Crushers are operating at near capacity, which should bring supplies in better balance with needs within the next few months. Nevertheless, the seasonally good demand for soybean meal this year has given a boost to soybean meal prices, which had declined from 1965 to 1968 under the influence of increased competition from other proteins--particularly fish meal, waste, and other synthetic proteins.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR COTTON IN 1970

Talk by James R. Donald  
Economic and Statistical Analysis Division  
at the Annual Agricultural Outlook Conference  
Washington, D.C., 3:30 P.M., Wednesday, February 18, 1970

The outlook for U.S. cotton this year again is highlighted by both reduced supply and disappearance. The cotton supply is down because of the smaller 1969 crop; smaller disappearance reflects reduced exports. Still, disappearance may exceed the 1969 crop, causing a slight reduction in stocks this season (figure 1).

Carryover of 6 Million  
Bales Likely

Next August, around 6 million bales of cotton likely will be on hand, down about one-half million from last summer. This would be the smallest carryover since 1953.

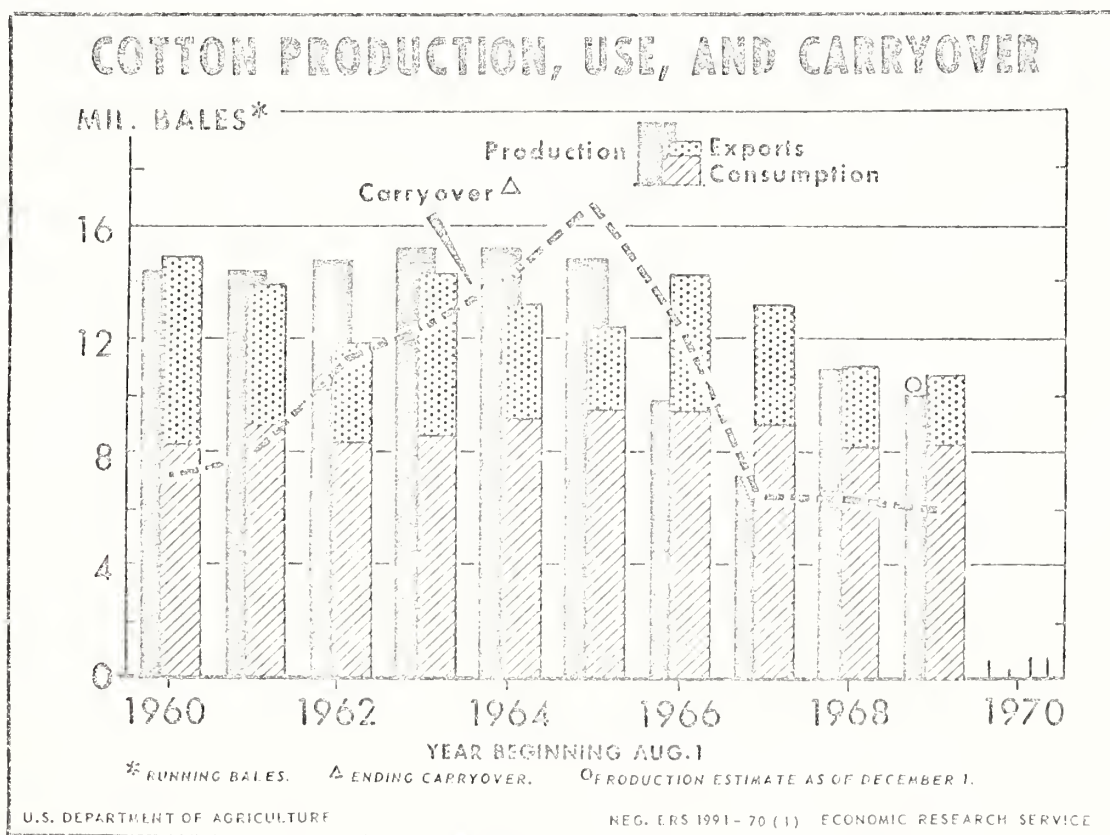


Figure 1





In contrast to the expected slight reduction in total stocks this year, CCC stocks may increase slightly. Although acquisitions from the 1969 crop likely will be less than from the 1968 crop, unsold CCC inventories will be above a year earlier. More cotton has been placed under loan so far this season, but redemptions for the season also may be greater. Heavier loan activity so far has reflected prices for many qualities close to loan levels, weaker demand than last year, and a change in CCC loan procedures so that many farmers will find it more profitable to place cotton under loan and leave it there until needed by the trade. Loan entries may equal last season's total of about 4-1/2 million bales, despite the smaller 1969 crop. Farmers may withdraw all but one-third. So, CCC could acquire 1-1/2 million bales. This, combined with unsold inventory, would mean an increase of about 1/4 million bales in CCC stocks, while trade stocks would be worked down about 3/4 million bales.

Trade holdings of about 3-1/2 million bales last August remained above average because of reduced supplies in 1968/69 and uncertainty about prices. By next August, the trade may work down holdings, partly in anticipation of a larger 1970 crop and because of higher interest rates this season.

#### World Trade Expands But U.S. Share Declines

Cotton exports this season may total nearly 2-1/2 million bales, a further drop from last year's small total of 2-3/4 million bales. For August-December, shipments totaled only 0.8 million bales, well below the 1.1 million for the year-earlier period. Sluggish exports this season are due to increased competition from several exporting countries with large carryover stocks, continued large crops in some countries, and lagging cotton use in many importing countries, particularly in Europe.

World cotton trade should increase moderately during this season from last year's reduced level and U.S. exports may pick up during the latter half of the season. New-crop supplies, particularly from South Brazil, will offer intense competition for U.S. cotton in coming months. But old-crop supplies are about depleted in most countries.

Foreign export availabilities over the years have been increasing; cotton production abroad has risen faster than consumption. Consequently, the gap between foreign Free-World cotton consumption and production has been narrowing (figure 2). However, the gap may widen slightly this year from last year's difference of only about 0.4 million bales, but stocks may be reduced abroad--particularly in producing countries. So the U.S. share of world trade probably will decline to a new record low, with U.S. shipments falling a little below 2-1/2 million bales.

#### Cotton Use Fails To Gain as Competition Intensifies

In the U.S., cotton continues to lose ground to man-made fibers, although not at 1968's record pace. Cotton's share of mill use in 1969 probably fell to near 40 percent, compared with 42 percent in 1968 and 49 percent in 1967 (figure 3). Man-made fibers probably accounted for about 57 percent of the market last year.





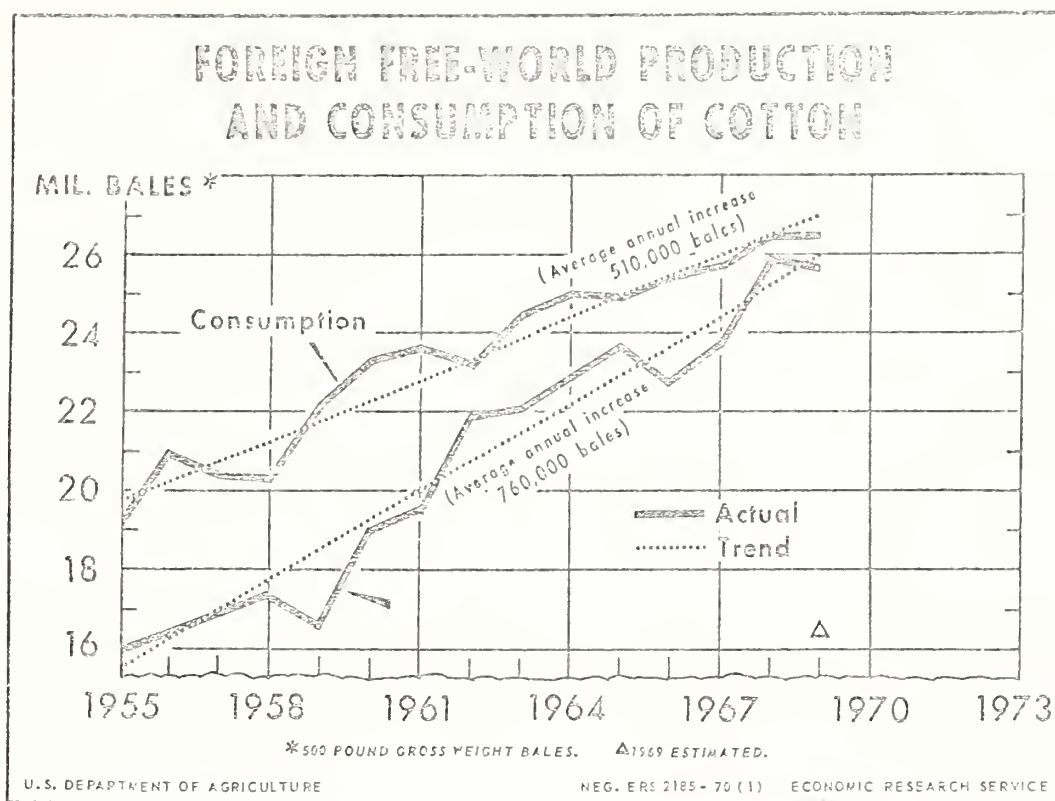


Figure 2

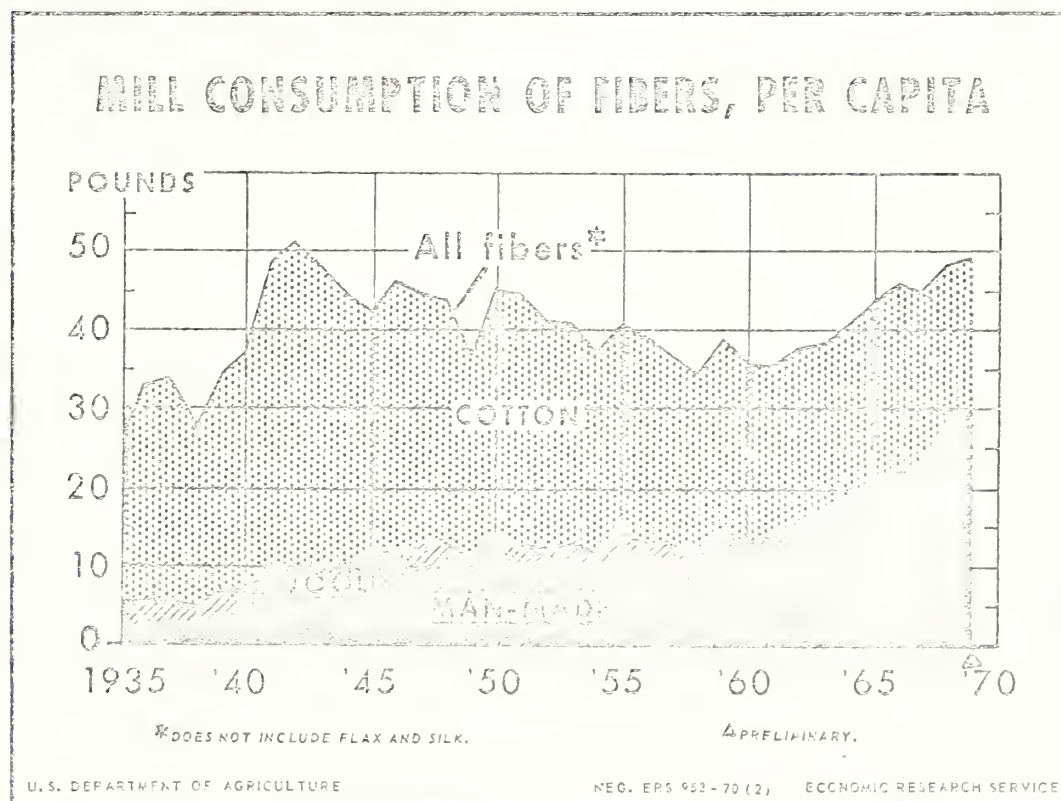


Figure 3



For the 1969/70 crop year, cotton use may remain near last season's reduced level of 8-1/4 million bales. During the early months of this season, the rate of use was down slightly from year-earlier levels. However, in December the seasonally adjusted daily rate exceeded that of a year earlier; and it might continue to surpass them in coming months (figure 4). Mill cloth inventories in relation to unfilled orders are not excessive, cloth prices and mill margins are up from last year, and cotton prices are generally lower.

Besides the competition from man-made fibers, cotton consumption also is being hurt by increasing cotton textile imports and reduced military purchases of cotton textiles. But man-made fibers remain the chief culprits, particularly the non-cellulosic fibers. Figure 5 shows the upward trend in use of these fibers. Lower prices have helped cotton to compete better with rayon and acetate fibers, but use of non-cellulosics has continued to advance.

Increasing penetration of fabric blends into all-cotton markets apparently is causing cotton to suffer further losses in fiber markets. This is particularly true of polyester-cotton fabric blends in end-uses such as bedsheeting. To illustrate, all-cotton bedsheeting accounted for 93 percent of the market in 1967. Last year, its share dropped to only about 60 percent.

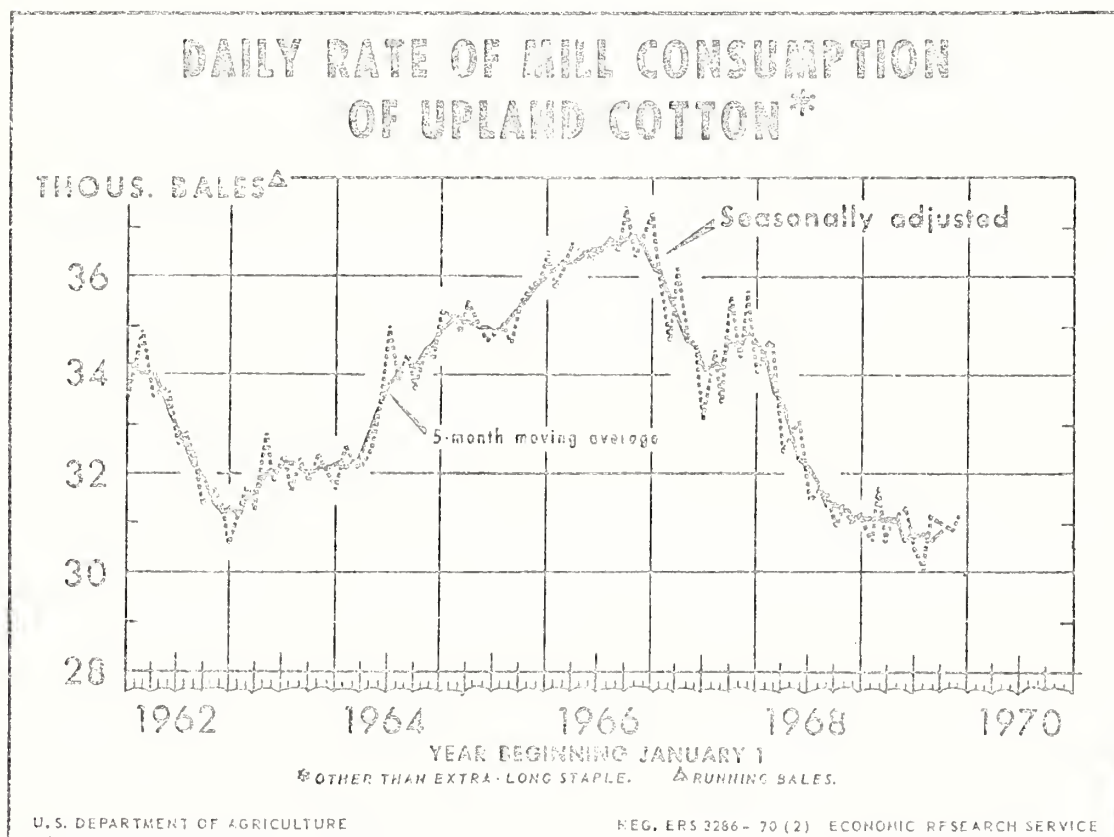


Figure 4



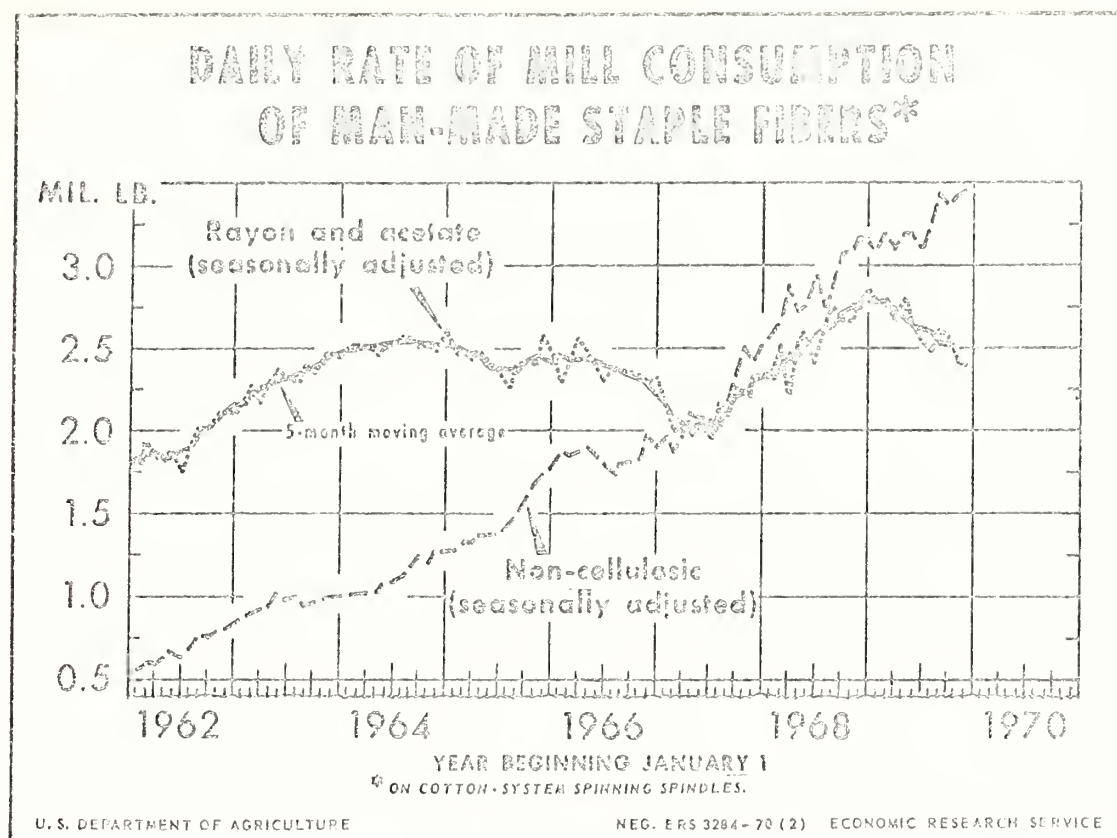


Figure 5

Cotton producers are attempting to meet the increasing competition from man-made fibers. In 1968/69, upland cotton producers contributed \$10.7 million to the cotton research and promotion programs. The budget for the 1969 program amounted to \$10 million. The 1970 budget totals \$10.6 million and continues to provide for a heavy concentration of effort in utilization research.

1969 Crop Smaller But Fiber Stronger:  
Prices Mixed as Supplies Vary

The 1969 cotton crop of about 10 million bales was down moderately from last season's 11 million-bale crop. Plantings were increased substantially, but yields were lower. Severe weather and insect problems were encountered, and the national yield of 436 pounds was well below the trend-yield and the lowest since 1957, as shown in figure 6.

On the quality side, the staple composition by major groupings is not significantly different from 1968. Ginnings to January 15 contained a little smaller proportion of cotton stapling 1-1/16 inches and longer. Final ginnings from the crop probably will contain about 63 percent of the longer staples, down slightly from the high of 69 percent for the 1968 crop. In 1969, plantings of shorter staple varieties were greatly increased, but adverse growing conditions sharply reduced output of these staples, limiting their proportionate rise. The 1969 cotton crop is a stronger fiber than last season's crop and the average mike reading is a little higher.





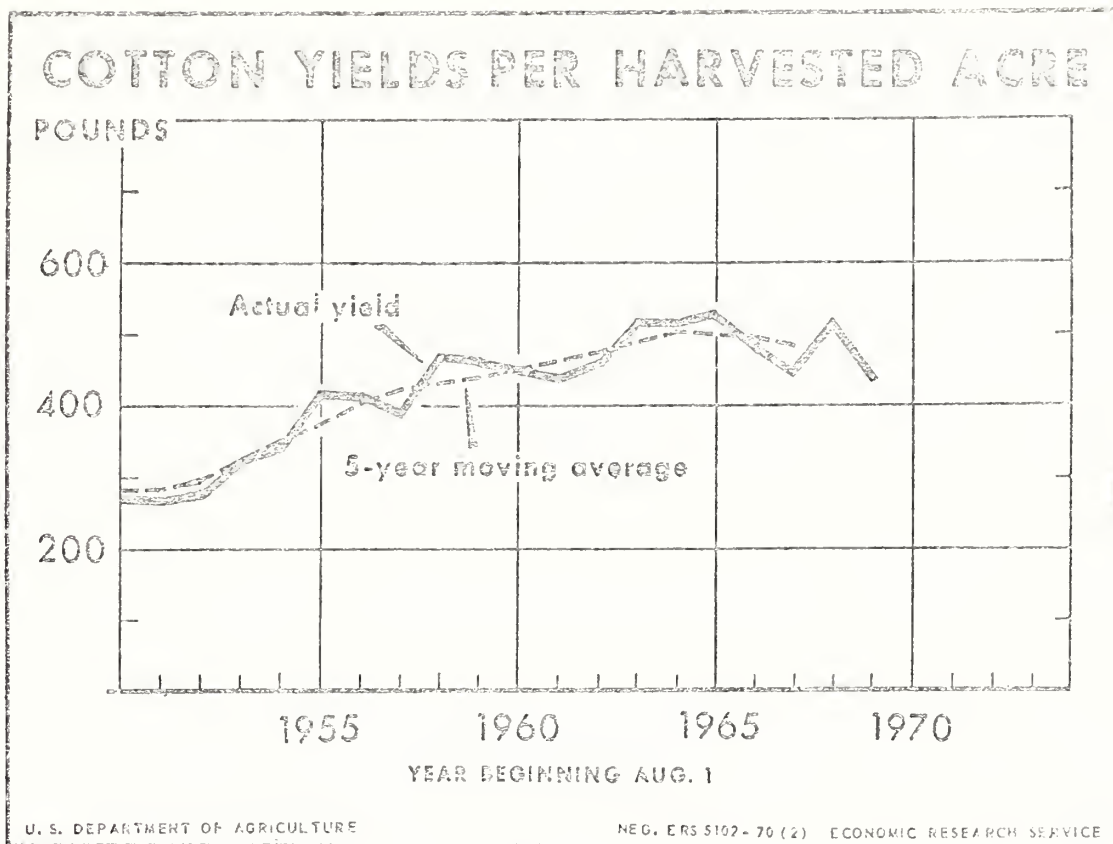


Figure 6

The 1970 upland cotton program is designed to encourage greater plantings. The national allotment was increased by a million acres over 1969. Also, as in 1969, acreage diversion will not be required for program cooperators and no payment will be made for voluntary diversion.

The 1970 loan rate for Middling 1-inch cotton (at average location) remains at 20.25 cents per pound. The price support payment, at 16.80 cents per pound, is up from 14.73 cents in 1969. Also, the more liberalized skip-row planting rules for measuring cotton against the allotment will remain unchanged from the previous year. The 1970 upland cotton program was approved by about 96 percent of producers voting in a national referendum during early December.

Spot market price movements have been mixed in recent months with prices for shorter staples showing a little strength. But prices for most staples have generally remained under year-earlier levels. Sluggish demand and above-average trade holdings of cotton have kept prices under pressure, particularly the longer staples.





The average spot market price for Middling 1-1/16 inch cotton in January was 24.93 cents per pound, compared with 26.14 cents last January. Price declines for the shorter staples have not been as sharp, since the supply is tighter in relation to demand. For Middling 1 inch, the January price averaged about 22.00 cents, compared with 22.48 cents a year earlier. For some of the shorter staples, prices are above year-earlier levels.

The average price received by farmers for all kinds of cotton to December 1 was 21.3 cents per pound, slightly below the season average of 22.15 cents for the 1968 crop. However, the average price showed more than the usual seasonal drop in December and January, falling well below the same months a year earlier. The support price for the 1969 crop of upland cotton (average of the crop) at 19.71 cents per pound is slightly higher than the 19.69 cents for the 1968 crop. Also, the direct price support payment rate was increased for the 1969 crop to 14.73 cents per pound, up from 12.24 cents for the 1968 crop.

#### U.S. Textile Trade Expands

U.S. imports of cotton textiles during calendar 1969 totaled slightly over 1 million equivalent bales of cotton, up about 3 percent from 1968, but a little below the 1966 high.

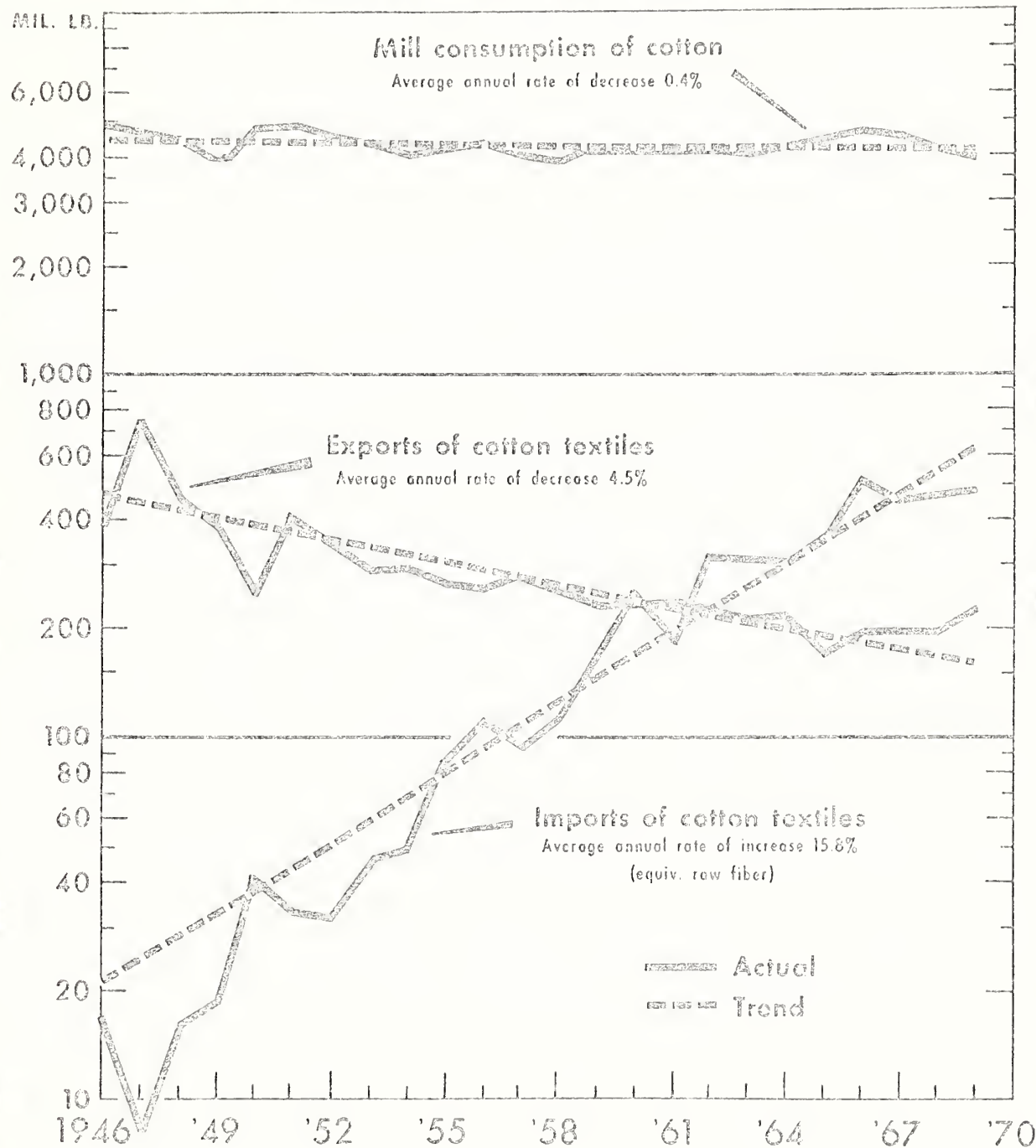
Exports of U.S. cotton textiles are much smaller than imports. Exports totaled 436,000 equivalent bales during January-November 1969. For all of 1969, exports probably totaled over 450,000 bales, sharply above 1968 because of increased exports of cotton textiles under P.L. 480.

During the past several years, cotton textile imports have increased not only in quantity but also as a share of the domestic market for cotton. Imports probably accounted for about 11.6 percent of the market in 1969, compared with 10.7 percent in 1968 and 9.5 percent in 1967.

Since 1946, U.S. imports have increased at an average rate of about 1.6 percent per year, while exports have declined about 5 percent annually (figure 7). Over the same period, mill consumption has declined at a rate of 0.4 percent per year.



# U.S. POSTWAR TRENDS IN COTTON CONSUMPTION AND COTTON TEXTILE TRADE\*



TRADE DATA IN RAW COTTON EQUIVALENT POUNDS.

1969 ESTIMATED.

U.S. DEPARTMENT OF AGRICULTURE

NEG. ERS 4381-70 (2) ECONOMIC RESEARCH SERVICE

Figure 7



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

1970 DAIRY OUTLOOK STATEMENT

Talk by A. G. Mathis  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D. C., 3:30 P.M., Wednesday, February 18, 1970

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U.S. milk production this year may change little from the 116.2 billion pounds of 1969. In early 1970, milk cow numbers were running about 2 percent under a year earlier and milk production per cow was up about the same amount. Prices farmers receive for milk will average higher than the record \$5.45 per 100 pounds in 1969 and income is expected to exceed the \$6.2 billion estimated for last year.

These forecasts assume that price support levels and Class I pricing in Federal order markets will remain unchanged.

The imbalance of cheese supplies despite rising production has been due to burgeoning demand. This situation caused cheese prices to rise to some 8 cents above support purchase prices in January, while butter and nonfat dry milk prices held near support purchase levels. Record cheese prices in recent months have held average prices farmers receive for milk some 4-1/2 percent above a year earlier. However, cheese production is catching up with demand, and prices (assuming no Sec. 709 cheese purchases) may subside to near support purchase prices by May or June. Thus, milk price gains for farmers likely will be smaller after the first quarter. And, in the absence of governmental action, 1970 prices may average about 3 percent above 1969.

Farm marketings of milk and cream may be near 1969 levels, so higher prices will push farmers' gross cash receipts to a new record high. As in 1969, rising production costs may offset much of the gain in gross receipts.

Milk cow numbers last year declined 2.7 percent to an average 12.7 million. The decline has slowed and in 1970 could continue slackening, though cattle prices likely will be strong enough to encourage individual herd culling. Higher prices for milk may maintain the milk-beef cattle price ratio at about 1969 levels.





Feed supplies have been ample and the milk-feed price ratio at or near record levels encourages heavy grain and concentrate feeding. However, as in 1968 and 1969, increases in milk per cow this fall and winter have been below average and only about enough to offset the relatively small decline in milk cow numbers. This has held milk production near year-earlier levels in recent months. For the rest of this year, pasture conditions, the quality and quantity of 1970 crops, and price prospects will be important determinants of milk production.

After declining in the first half of 1969, commercial disappearance (sales) of milk in all dairy products rose in the second half, bringing the year's sales almost to the 109.5 billion pounds milk equivalent (fat solids basis) in 1968. For the year, cheese and low-fat fluid milk gained sharply; frozen dessert sales were about the same; most other dairy product sales declined. For 1970, rising population and a continuing high level of demand for livestock products suggest that commercial disappearance of dairy products could rise slightly.

USDA's removals of dairy products from the market may total about the same this year as the 4.6 billion milk equivalent in 1969, because prospects are for farm marketings of milk and commercial disappearance to change only slightly.

CCC donations of dairy products last year were equivalent to about 4 billion pounds of milk, slightly less than in 1968. Prospects for 1970 are for continuing high-level program use of dairy products, with supplies placing limits on donations of cheese.

Since sales will increase less than population and farm household use of home produced dairy products is falling, per capita consumption of milk in all dairy products is expected to decline from the 565 pounds per person in 1969.

Exports of U.S. dairy products this year likely will be down from the 0.9 billion pounds milk equivalent of 1969. Large world supplies of dairy products limit off-shore sales for U.S. production. Moreover, CCC will have smaller supplies available for export than in 1969.

Imports in 1969 were equivalent to 1.6 billion pounds of milk, compared with 1.8 billion in 1968. Imports of cheese rose sharply in the last half of 1969 and a high-solids product called "ice cream" was imported for use as a dairy ingredient. Imports could rise in 1970.

Commercial stocks of dairy products at the beginning of 1970 were lower than a year earlier as the demand for cheese lowered American cheese stocks. Also, heavy program use of dairy products dropped USDA holdings from year-earlier levels and total dairy stocks fell below 1969 beginning levels. Commercial stocks in 1970 may be larger, depending on cheese production and imports, but USDA holdings will be down again.





## Dairying in the 1970's

Some general ideas of the future of dairying have been explored based largely on projecting trends of the 1960's. These projections assume no change in the dairy support program law, or in the orientation of Federal orders. The projections also assume a steady growth of the economy, less inflationary pressure than in 1969, rising wages and prices, increasing livestock prices, and relatively stable prices for feed.

Under these conditions, though interrupted by the present leveling off, the downward trend of U.S. milk production underway since 1964 would continue in the 1970's, perhaps to a level less than 110 billion pounds by 1980. The number of farms selling milk or cream would fall to about 200,000 from the present 400,000. This would sharply increase the size of dairy herds. Milk per cow is projected to rise to around 12,000 pounds from today's 9,200 pounds. Cow numbers would decline by about a third to some 9 million head. The proportion of farm marketings of whole milk qualified for fluid use would increase faster, while farm sales of cream would practically disappear.

Per capita consumption of milk in all dairy products is expected to continue downward. Donations likely will decline if supply comes into line with market demand, as expected. But the food stamp program and other programs would continue to supply the needy. Commercial disappearance (milk equivalent, fat solids basis) likely will hold up better than production, and excess supplies of milk are expected to dwindle. The use of solids-not-fat will increase and use of whey solids for human food will rise sharply. Emphasis on new product development may yield products that should bolster sales.

Projected milk supplies in closer balance with market demand than at present suggest that prices to farmers will depend more on market conditions than on programs. Prices of milk may increase more in the 1970's than the \$1.30 per hundred pounds rise from 1959 to 1969. Despite smaller farm marketings of milk, cash receipts from dairying also then would increase more than the \$1.5 billion gain in the 1960's.

The move in dairy farming in the 1970's will be toward larger, more highly organized dairy operations. They will require more capital per cow and greater managerial ability than most present operations.

Farmers' marketing of dairy products will become more complex. Their marketing organizations already are becoming fewer and larger. They will be able to improve farm pickup and delivery of milk to plants to reduce farm-to-plant and over-the-road transportation charges. New larger plants will replace many small obsolete dairy plants. They will be located carefully in relation to production and markets to minimize hauling costs, and will allocate milk supplies to products more closely in line with market demands than at present. Such plants also may reduce dairy manufacturing costs and help return more of the retail dairy dollar to farmers.



# DAIRY OUTLOOK CHARTS

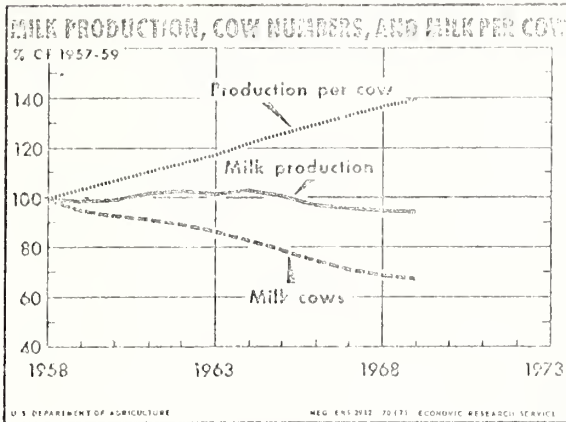


Figure 1

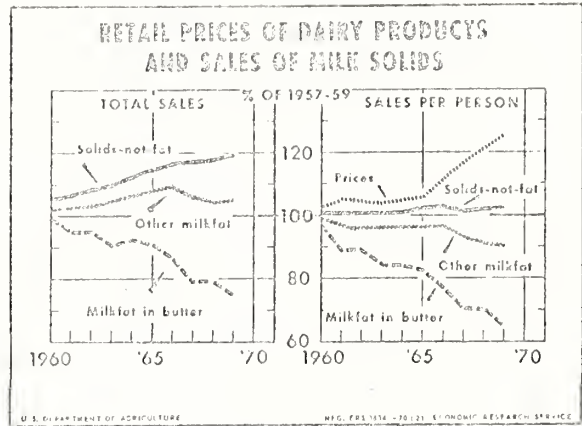


Figure 4

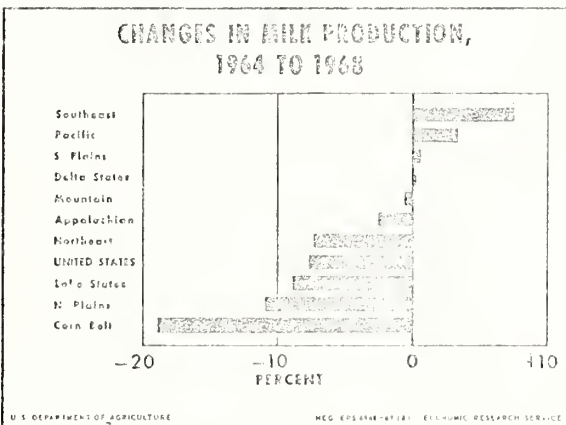


Figure 2

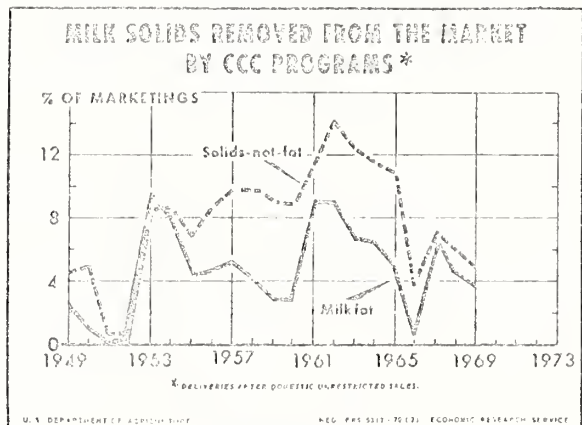


Figure 5

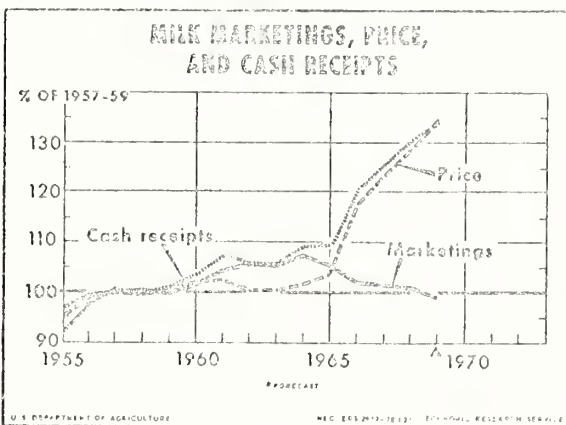


Figure 3

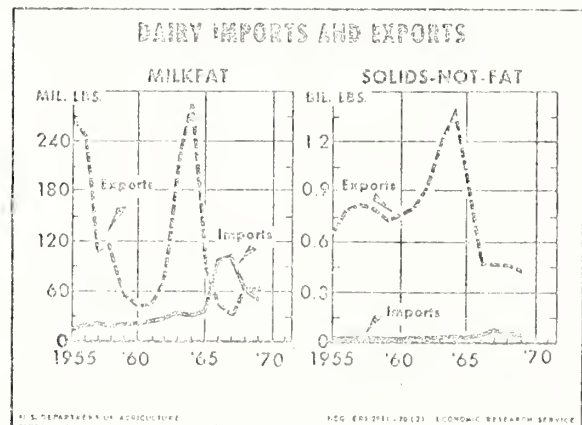


Figure 6



Table 1.--Milk production and factors affecting supply, United States,  
selected years, 1950-70 <sup>1/</sup>

Year	Milk cattle on farms January 1			Milk cows on farms, average during year	Milk production		Prices received by farmers, 1957-59=100	
	Cows and heifers 2 years old and over	Heifers 1-2 years	Heifer calves under 1 year		Per cow	Total	Dairy products	All farm products
	Thou.	Thou.	Thou.		Lb.	Mil. lb.		
1950	23,853	5,394	6,208	21,994	5,314	116,602	97	107
1955	23,462	5,786	6,094	21,044	5,842	122,945	96	96
1960	19,527	5,079	5,575	17,515	7,029	123,109	101	99
1961	19,271	5,016	5,446	17,243	7,290	125,707	101	99
1962	18,963	4,887	5,264	16,842	7,496	126,251	99	101
1963	18,379	4,708	4,935	16,260	7,700	125,202	99	100
1964	17,647	4,395	4,692	15,677	8,099	126,967	100	98
1965	16,981	4,149	4,420	14,954	8,304	124,173	102	103
1966	15,987	3,860	4,151	14,093	8,507	119,892	115	110
1967	15,198	3,636	4,089	13,501	8,797	118,769	119	105
1968	14,644	3,579	4,028	13,038	8,992	117,234	124	103
1969 <sup>2/</sup>	14,152	3,525	3,939	12,689	9,158	116,200	129	114
1970 <sup>2/</sup>	13,875	3,461	3,859					
Average prices received by farmers per 100 pounds					Parity prices per 100 pounds <sup>3/</sup>			
All milk: whole- sale	Milk eligible for fluid market	Milk, manufac- turing grade	Pot- tling milk <sup>4/</sup>	Milk- fat in cream <sup>5/</sup>	All milk: whole- sale	Milkfat in cream	Equivalent for manu- facturing milk	
Dol.	Dol.	Dol.	Dol.	Ct.	Dol.	Ct.	Dol.	
1950	3.89	4.36	3.16	4.86	62.0	4.32	69.2	3.82
1955	4.01	4.50	3.15	5.18	57.8	4.71	74.1	3.94
1960	4.21	4.69	3.25	5.48	60.5	5.01	74.1	4.01
1961	4.22	4.65	3.36	5.43	61.5	5.13	74.9	4.09
1962	4.09	4.54	3.20	5.35	59.4	5.25	76.2	4.15
1963	4.10	4.53	3.21	5.31	59.5	5.33	77.2	4.18
1964	4.15	4.58	3.26	5.35	60.2	5.38	77.3	4.20
1965	4.23	4.63	3.34	5.39	61.1	5.53	79.2	4.31
1966	4.81	5.18	3.97	5.82	67.2	5.73	82.1	4.47
1967	5.01	5.43	4.06	6.18	68.2	5.88	84.0	4.62
1968	5.24	5.67	4.22	6.53	68.6	6.06	86.1	4.79
1969 <sup>2/</sup>	5.46	5.87	4.46	6.78	69.0	6.49	91.5	5.15
1970								

<sup>1/</sup> Includes available data for Alaska and Hawaii beginning 1960.

<sup>2/</sup> Preliminary.

<sup>3/</sup> At beginning of marketing year.

<sup>4/</sup> Dealers' average buying price for milk used in fluid products.

<sup>5/</sup> Cents per pound.





Table 2.--Dairy: Feed costs, milk cow and other livestock prices, milk-livestock price ratios, and feed consumed, United States, 1950-69

Year	Dairy ration cost		Milk cow cost		Livestock prices and milk-livestock price ratios			
	Value	Milk-	Price	Milk	Beef-	Manufac-	Hog	Manufac-
	per 100 pounds	feed price ratio	received per head	required to buy a cow	cattle price per 100 pounds	turing price per 100 pounds	price per 100 pounds	turing milk-hog price ratio
	Dol.	Lb.	Dol.	Cwt.	Dol.	Lb.	Dol.	Lb.
1950	3.16	1.24	198	51	23.30	0.14	18.00	0.18
1955	3.16	1.28	146	36	15.60	.20	15.00	.21
1956	3.05	1.36	153	37	14.90	.22	14.40	.23
1957	3.05	1.39	166	39	17.20	.19	17.80	.18
1958	2.94	1.41	209	51	21.90	.15	19.60	.16
1959	2.93	1.43	233	56	22.60	.14	14.10	.23
1960	2.92	1.45	223	53	20.40	.16	15.40	.21
1961	2.92	1.45	224	53	20.20	.17	16.60	.20
1962	2.95	1.40	221	54	21.30	.15	16.30	.20
1963	3.04	1.36	215	52	19.90	.16	14.90	.22
1964	3.03	1.38	209	50	18.00	.18	14.80	.22
1965	3.03	1.40	212	50	19.90	.17	20.60	.17
1966	3.15	1.53	246	51	22.20	.18	22.80	.18
1967	3.22	1.56	260	52	22.30	.18	18.90	.22
1968	3.10	1.70	274	52	23.40	.18	18.60	.23
1969 1/	3.14	1.74	300	55	26.19	.17	23.01	.20
	Grain and other concentrates fed to milk cows		Dairy pasture feed condition, as percent of normal		Alfalfa, hay prices		Quantity fed per cow, winter feeding period ending in May 2/	
	Total fed 3/	Per cow 3/	Per 100 pounds of milk produced 4/		Received by farmers per ton	Paid by farmers per ton	Hay	Silage
	Thou. tons	Lb.	Lb.	Pct.	Dol.	Dol.	Tons	Tons
1950	18,516	1,629	30.6	83	23.10	30.90	2.2	1.7
1955	18,664	1,758	30.1	77	22.00	33.70	2.2	2.2
1956	19,098	1,825	30.2	75	21.90	32.50	2.3	2.4
1957	19,946	1,945	31.2	83	18.60	31.50	2.2	2.3
1958	19,809	2,003	31.4	86	18.60	29.50	2.4	2.5
1959	19,803	2,050	31.6	80	21.70	29.80	2.3	2.5
1960	19,821	2,259	32.2	82	21.00	31.60	2.5	2.7
1961	20,916	2,404	33.2	84	21.00	30.90	2.5	2.6
1962	21,617	2,533	34.3	80	21.40	30.60	2.5	2.8
1963	21,858	2,646	35.1	73	23.50	32.90	2.4	2.8
1964	22,464	2,800	35.9	73	24.00	32.60	2.4	3.1
1965	22,827	2,953	36.7	80	24.00	33.00	2.4	3.2
1966	22,569	3,000	37.6	78	24.70	33.40	2.3	3.3
1967	22,790	3,374	38.3	80	23.60	34.08	2.4	3.5
1968	22,886	3,519	39.1	83	23.00	32.94	2.4	3.6
1969 1/	23,100	3,650	39.8	82	23.81	34.08	2.4	3.7

1/ Preliminary. 2/ In herds kept by dairy reporters. 3/ Not comparable to earlier years, beginning 1965. 4/ On farms where milk or cream was sold. Beginning 1966, data are for all farms where milk was produced. 5/ Estimated.





Table 3.--Number and size of dairy farms, United States,  
selected years, 1950-69 <sup>1/</sup>

Type	Unit	1950	1954	1959	1964	1969 2/	Change 1950-69
Farms reporting milk cows							
Average number of cows per farm	Number	3,648 5.8	2,936 6.9	1,792 9.2	1,134 12.9	710 16.5	-81 -184
Farms selling milk and/or cream							
Farms selling whole milk	Number	1,000 3/2,007	1,475 934	1,017 770	641 545	400 ---	4/-80 ---
Farms selling cream	Number	1,000 3/1,097	541 541	262	103	---	---
Commercial dairy farms <sup>5/</sup>							
Average number of cows per farm	Number	1,000 602	549 19.6	428 25.9	367 30.8	300 35.0	-50 +119
With over \$10,000 in sales	Number	1,000 71	83	155	186	220	+210
Farms reporting milk cows by size of herd <sup>6/</sup>							
1-9 milk cows	Number	1,000 2,989	2,295	1,310	712	363	-88
10-19 milk cows	Number	1,000 477	418	262	160	89	-81
20-29 milk cows	Number	1,000 119	150	141	114	85	-28
30-49 milk cows	Number	1,000 47	71	89	101	109	+132
50-99 milk cows	Number	1,000 13	19	28	38	50	+285
100 + milk cows	Number	1,000 3.6	4.7	6.6	8.9	13	+261

<sup>1/</sup> Data for 1950-64 from Census of Agriculture; 1969 estimates are based primarily on 1959-64 trends. <sup>2/</sup> Estimated. <sup>3/</sup> 1949 data. <sup>4/</sup> Change from 1949 to 1969. <sup>5/</sup> Commercial farms are those with an annual value of sales amounting to \$2,500 or more. Farms with a value of sales of \$50 to \$2,499 were classified as commercial if the farm operator was under 65 years of age and (1) he did not work off the farm 100 or more days during the year and (2) the income received by the operator and members of his family from nonfarm sources was less than the value of all farm products. For commercial dairy farms, dairy products accounted for 50 percent or more of total sales. <sup>6/</sup> Data for 1954 and 1959 based on reports for a sample of farms.



Table 4.--Milk marketings by farmers, income and utilization,  
United States, 1950-69 <sup>1/</sup>

Year	Used on farms where produced	Milk marketed by farmers				Cash receipts from milk marketed by farmers			
		Sold to plants and dealers		Retail- ed by farmers as milk and cream	Total	Milk sold to plants and dealers	Cream sold to plants and dealers	Retail- ed by farmers	Total
		As whole milk	As farm- separated cream						
		Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. dol.	Bil. dol.	Bil. dol.
1950	18.3	74.2	20.2	3.9	98.3	2.9	0.5	0.3	3.7
1951	17.9	74.5	18.5	3.7	96.7	3.4	.5	.3	4.3
1952	17.0	77.3	16.9	3.5	97.7	3.8	.5	.3	4.6
1953	16.1	84.6	16.3	3.2	104.1	3.7	.4	.3	4.4
1954	15.4	87.9	15.9	2.9	106.7	3.5	.3	.3	4.1
1955	14.6	91.0	14.7	2.7	108.3	3.6	.3	.3	4.2
1956	13.6	95.5	13.3	2.4	111.2	4.0	.3	.2	4.5
1957	12.4	98.3	11.7	2.3	112.2	4.1	.3	.2	4.6
1958	11.1	99.6	10.3	2.2	112.1	4.1	.2	.2	4.6
1959	10.0	100.8	9.1	2.1	112.0	4.2	.2	.2	4.6
1960	9.2	103.9	7.9	2.1	114.0	4.4	.2	.2	4.8
1961	8.4	108.4	6.9	2.1	117.3	4.6	.2	.2	4.9
1962	7.7	110.7	5.9	2.0	118.6	4.5	.1	.2	4.9
1963	7.1	111.2	5.1	1.9	118.1	4.6	.1	.2	4.9
1964	6.5	114.2	4.4	1.9	120.5	4.7	.1	.2	5.0
1965	6.0	112.7	3.6	1.8	118.2	4.8	.1	.2	5.0
1966	5.5	109.7	3.0	1.7	114.4	5.3	.1	.2	5.5
1967	5.2	109.4	2.4	1.8	113.6	5.5	.1	.2	5.7
1968 2/	4.7	108.8	2.0	1.8	112.6	5.7	4/	.2	6.0
1969 3/	4.3	108.7	1.5	1.7	111.9	6.0	7/	.2	6.2
Utilization of milk supply 5/									
			Cheese		Evapo- rated, condensed and dry whole milk	Frozen dairy prod- ucts, net	Creamed cottage cheese and other factory products	Total factory products	Miscel- laneous 6/
	Fluid	Creamery butter, net	American	Other					
	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.
1950	42.4	27.8	9.0	2.9	7.9	6.9	0.7	55.2	0.7
1951	43.9	24.1	8.8	2.8	8.0	7.0	.9	51.6	1.4
1952	45.1	23.8	8.6	3.1	7.6	7.5	1.0	51.6	1.1
1953	45.9	28.5	10.2	3.1	7.0	7.8	1.0	57.6	.4
1954	47.5	29.3	10.5	3.3	6.8	7.7	1.1	58.7	.5
1955	49.1	28.0	10.1	3.5	7.1	8.2	1.2	58.0	1.2
1956	50.7	28.7	9.9	3.8	7.2	8.5	1.3	59.4	1.1
1957	51.8	29.0	10.0	3.5	7.0	8.6	1.2	59.2	1.3
1958	52.1	29.7	9.5	3.2	6.3	8.8	1.3	58.9	1.1
1959	52.4	28.7	9.2	3.4	6.4	9.4	1.4	58.4	1.2
1960	53.0	29.4	9.7	3.7	6.2	9.5	1.4	59.8	1.2
1961	52.6	31.8	11.2	3.7	6.0	9.6	1.3	63.6	1.2
1962	53.3	33.1	10.7	3.7	5.7	9.7	1.4	64.1	1.2
1963	54.3	30.7	10.9	3.9	5.6	9.9	1.5	62.7	1.3
1964	54.9	31.3	11.5	4.2	5.7	10.3	1.7	64.5	1.1
1965	55.4	28.5	11.5	4.3	5.3	10.6	1.6	61.8	1.2
1966	55.4	23.7	12.2	4.5	5.4	10.5	1.7	57.9	2.5
1967	54.0	26.1	12.7	4.5	4.6	10.5	1.4	59.7	1.3
1968 2/	53.7	25.0	12.7	4.7	4.6	11.0	1.5	59.4	-.4
1969 3/	53.0	23.9	12.8	5.0	4.5	11.0	1.5	58.7	.5

<sup>1/</sup> Includes available data for Alaska and Hawaii beginning 1960; totals may not add due to rounding.

<sup>2/</sup> Preliminary. <sup>3/</sup> Estimated. <sup>4/</sup> Less than 50 million dollars. <sup>5/</sup> Total supply includes milk marketed by farmers, net imports of ingredients such as frozen cream and butterfat-sugar mixtures, and net change in storage cream. <sup>6/</sup> Residual, including miscellaneous minor uses and any inaccuracies of independently determined use items.



Table 5.—Total milk: Commercial disappearance,  
1966-69

Item	1966	1967	1968	1969 1/	Change from a year earlier	
	Billion pounds	Billion pounds	Billion pounds	Billion pounds	Percent	Percent
Production	119.9	128.8	117.3	116.2	-0.9	-1.3
Farm use	5.5	5.2	4.7	4.3	-5.5	-9.6
Marketings	114.4	113.6	112.6	111.9	-7	-9
Beginning commercial stocks (Jan. 1)	3.9	4.8	4.3	4.0	+23.1	-10.4
Imports	2.8	2.9	1.8	1.6	+3.6	-37.9
Total supplies	121.1	121.3	118.7	117.5	+2	-2.1
Ending commercial stocks (Dec. 31)	4.8	4.3	4.0	3.8	-10.4	-7.0
Net removals (CCC and PIK)	.6	7.4	5.2	4.5	2/	-29.7
Commercial disappearance	115.7	109.6	109.5	109.2	-5.3	-1

1/ Preliminary.

2/ 1967 level 12 times that of 1966.



Table 6.--Factors influencing and indicative of the demand for milk  
and dairy products, United States, 1950-69 1/

Year	Total population, July 1 (including Armed Forces overseas)	Total civilian employment	BLS consumer price index 1957-59=100	Per capita disposable income		Civilian per capita disappearance			
				Actual	Deflated by consumer price index	Milk equivalent		Milk solids	
						Fat solids basis	Calcium content basis	Milk fat	Solids- not- fat
	Million	Million		Dollars	Dollars	Pounds	Pounds	Pounds	Pounds
1950	151.7	58.9	83.8	1,364	1,628	740	507	29.3	43.6
1951	154.3	60.0	90.5	1,468	1,622	712	507	28.1	43.5
1952	157.0	60.3	92.5	1,518	1,641	698	520	27.2	44.1
1953	159.6	61.2	93.2	1,582	1,697	689	510	26.7	43.5
1954	162.4	60.1	93.6	1,585	1,693	697	514	27.0	43.8
1955	165.3	62.2	93.3	1,666	1,786	706	525	27.2	44.5
1956	168.2	63.8	94.7	1,743	1,841	702	525	26.9	44.6
1957	171.3	64.1	98.0	1,801	1,838	687	518	26.1	44.3
1958	174.1	63.0	100.7	1,831	1,818	682	514	25.7	43.7
1959	177.1	64.6	101.5	1,905	1,877	667	514	25.1	43.7
1960	180.7	65.8	103.1	1,937	1,879	653	512	24.5	43.4
1961	183.8	65.7	104.2	1,983	1,903	641	505	24.0	43.0
1962	186.7	66.7	105.4	2,064	1,958	641	505	23.9	43.0
1963	189.4	67.8	106.7	2,136	2,002	631	503	23.4	42.3
1964	192.1	69.3	108.1	2,280	2,109	631	505	23.3	42.5
1965	194.6	71.1	109.9	2,432	2,213	618	503	22.9	42.4
1966	196.9	72.9	113.3	2,599	2,298	602	503	22.2	42.2
1967	199.1	74.4	116.3	2,745	2,360	580	497	21.4	41.5
1968	201.2	75.9	121.2	2,933	2,420	576	488	21.2	41.6
1969 2/	203.2	77.9	127.7	3,098	2,419	565	488	20.8	41.5
Average retail prices, BLS index, 1957-59=100									
Year	All foods	Dairy prod- ucts	Fluid milk, grocery	Butter	Cheese, American process	Ice cream	Evaporated milk	Margarine, colored	Per capita margarine consumption
Pounds									
1950	85.8	84.7	81.8	96.7	88.6	---	84.4	104.8	6.1
1951	95.4	94.5	90.7	108.5	100.9	101.1	96.1	117.4	6.6
1952	97.1	98.5	95.2	113.3	103.7	101.8	99.5	99.9	7.9
1953	95.6	96.8	94.1	105.3	103.4	101.0	97.4	100.4	8.1
1954	95.4	93.7	92.1	96.5	93.7	99.2	92.5	101.3	8.5
1955	94.0	93.6	92.3	94.5	93.7	97.5	91.1	98.2	8.2
1956	94.7	96.0	95.1	96.7	99.1	97.3	94.0	99.0	8.2
1957	97.8	98.8	98.4	99.6	99.9	99.3	97.5	102.7	8.6
1958	101.9	100.3	100.3	99.5	100.1	100.2	100.9	100.8	9.0
1959	100.3	101.0	101.3	101.0	100.0	100.4	101.6	96.3	9.2
1960	101.4	103.2	103.7	100.5	103.9	99.7	105.3	92.9	9.4
1961	102.6	104.7	104.0	102.6	110.4	99.5	106.1	99.0	9.4
1962	103.6	104.1	103.5	101.1	109.8	98.8	104.2	98.4	9.3
1963	105.1	103.8	103.0	101.0	110.4	98.1	103.1	95.4	9.6
1964	106.4	104.7	103.3	102.0	113.4	96.2	102.9	95.4	9.7
1965	108.8	105.0	102.8	103.6	116.6	94.4	105.3	101.9	9.9
1966	114.2	111.8	109.4	112.8	130.6	96.6	110.6	104.5	10.5
1967	115.2	116.7	113.8	115.9	136.3	99.0	117.4	104.8	10.5
1968	119.3	120.6	118.5	116.8	139.2	98.8	119.8	103.3	10.6
1969 2/	125.5	124.5	121.8	118.3	146.8	99.5	123.5	103.0	10.8

1/ Includes available data for Alaska and Hawaii beginning 1960. 2/ Preliminary.





Table 7.--Milk equivalent: Domestic civilian disappearance, commercial and noncommercial sources, total and per capita, United States, 1947-49 and 1957-59 averages, selected years, 1950-69

Year	Civilian disappearance						Consumption excluding donations from USDA supplies		
	Consumed on farms 1/	USDA donations to civilian channels	National School Lunch and Special Milk Programs	Commer- cial sources	All sources	Total military utiliza- tion 2/	Civilian	Military	Total
----- Million pounds -----									
1947-49	15,458	134	482	91,547	107,621	1,541	107,487	1,538	109,025
1957-59	8,396	3,035	2,105	102,793	116,348	2,653	113,294	2,170	115,464
1950	14,250	1,271	623	94,964	111,108	1,766	109,837	1,766	111,603
1955	11,359	3,102	1,394	98,697	114,552	3,329	111,450	2,627	114,077
1956	10,508	3,340	1,743	100,554	116,145	3,123	112,805	2,635	115,440
1957	9,431	2,224	1,917	102,077	115,649	2,775	113,425	2,333	115,758
1958	8,380	4,040	2,113	102,352	116,885	2,610	112,845	2,114	114,959
1959	7,378	2,840	2,284	103,949	116,451	2,574	113,611	2,064	115,675
1960	6,610	2,040	2,455	105,259	116,364	2,532	114,324	2,228	116,552
1961	5,950	3,385	2,602	104,191	116,128	2,472	112,743	2,111	114,854
1962	5,334	4,848	2,755	104,839	117,776	2,969	112,928	2,344	115,272
1963	4,813	4,929	2,902	105,239	117,833	2,964	112,954	2,415	115,369
1964	4,337	5,206	3,031	107,008	119,582	3,007	114,376	2,525	116,901
1965	3,915	3,593	3,215	107,969	118,692	2,819	115,099	2,387	117,486
1966	3,508	1,129	3,373	108,713	116,723	2,376	115,594	2,376	117,970
1967	3,174	3,105	3,441	103,730	113,450	2,117	110,345	2,117	112,462
1968	2,890	4,112	3,519	103,285	113,806	3,229	109,694	2,118	111,812
1969 3/	2,580	3,973	3,494	102,851	112,893	3,032	108,925	2,028	110,953
-----									
Per capita civilian disappearance 4/							Civilian consumption excluding donations from USDA supplies		
	Consumed on farms 1/	USDA donations to civilian channels	National School Lunch and Special Milk Programs		Commercial sources	All sources			
----- Pounds -----									
1947-49	106	1	3		631	742		741	
1957-59	49	18	12		600	679		661	
1950	95	8	4		632	740		731	
1955	70	19	9		608	706		687	
1956	64	20	11		608	702		682	
1957	56	13	11		606	687		674	
1958	49	24	12		597	682		658	
1959	42	16	13		596	667		651	
1960	37	11	14		591	653		642	
1961	33	19	14		575	641		622	
1962	29	26	15		570	641		614	
1963	26	26	16		564	631		605	
1964	23	27	16		565	631		604	
1965	20	19	17		563	618		600	
1966	18	6	17		561	602		596	
1967	16	16	18		530	580		564	
1968	15	21	18		523	576		555	
1969 3/	13	20	17		515	565		545	

1/ Milk and butter consumed in households on milk-producing farms, 1947-54; 1955 to date includes a small amount of farm-churned butter sold. 2/ Includes any quantities used by military in civilian feeding programs abroad. 3/ Preliminary. 4/ Aggregate in each category divided by total civilian population.



Table 8.--Milk and dairy products sales (domestic disappearance, commercial sources) total and per capita, United States, 1950-69 1/

Year	Fluid milk product sales										Cheese				Evaporated and condensed				Frozen products						Dry milk products									
	Whole milk					Skim milk					Butter		Whole and part skim milk cheese		Cottage cheese		Evaporated whole milk		Condensed whole milk		Evaporated and condensed skim milk		Ice cream		Ice cream		Frozen dairy products		Dry whole milk		Dry skim milk		Dry whey	
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
27,280	28,360	29,350	30,660	32,100	32,710	33,230	34,270	35,570	36,860	37,360	38,920	40,620	42,110	43,750	45,440	47,200	49,000	50,860	52,750	54,680	56,660	58,690	60,770	62,900	65,080	67,310	69,590	71,920	74,300	76,730	79,210	81,740	84,320	
1,400	1,520	1,610	1,710	1,840	1,870	1,910	1,950	2,020	2,150	2,210	2,360	2,520	2,630	2,750	2,880	3,020	3,170	3,330	3,490	3,660	3,830	4,000	4,180	4,360	4,540	4,730	4,920	5,110	5,300	5,490	5,680	5,870	6,060	
40,870	42,560	44,000	45,500	47,000	48,180	49,500	50,700	51,800	52,900	54,000	55,200	56,400	57,600	58,800	60,000	61,200	62,400	63,600	64,800	66,000	67,200	68,400	69,600	70,800	72,000	73,200	74,400	75,600	76,800	78,000	79,200	80,400	81,600	
1,371	1,388	1,407	1,426	1,445	1,464	1,483	1,502	1,521	1,540	1,559	1,578	1,597	1,616	1,635	1,654	1,673	1,692	1,711	1,730	1,749	1,768	1,787	1,806	1,825	1,844	1,863	1,882	1,901	1,920	1,939	1,958	1,977	1,996	
333	353	373	393	412	432	452	472	492	512	532	552	572	592	612	632	652	672	692	712	732	752	772	792	812	832	852	872	892	912	932	952	972	992	
806	778	750	722	694	666	638	610	582	554	526	498	470	442	414	386	358	330	302	274	246	218	190	162	134	106	78	50	22	0	0	0	0	0	
2,794	2,602	2,410	2,218	2,026	1,834	1,642	1,450	1,258	1,066	874	682	490	298	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
300	289	278	267	256	245	234	223	212	201	190	179	168	157	146	135	124	113	102	91	80	69	58	47	36	25	14	3	0	0	0	0	0	0	
765	732	700	668	636	604	572	540	508	476	444	412	380	348	316	284	252	220	188	156	124	92	60	28	0	0	0	0	0	0	0	0	0	0	
554	569	584	599	614	629	644	659	674	689	704	719	734	749	764	779	794	809	824	839	854	869	884	899	914	929	944	959	974	989	1,004	1,019	1,034	1,049	
37	46	54	62	70	78	86	94	102	110	118	126	134	142	150	158	166	174	182	190	198	206	214	222	230	238	246	254	262	270	278	286	294	302	
17	20	25	31	38	45	52	59	66	73	80	87	94	101	108	115	122	129	136	143	150	157	164	171	178	185	192	199	206	213	220	227	234	241	
8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
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49	61	70	78	86	94	102	110	118	126	134	142	150	158	166	174	182	190	198	206	214	222	230	238	246	254	262	270	278	286	294	302	310	318	
525	632	702	762	812	862	912	962	1,012	1,062	1,112	1,162	1,212	1,262	1,312	1,362	1,412	1,462	1,512	1,562	1,612	1,662	1,712	1,762	1,812	1,862	1,912	1,962	2,012	2,062	2,112	2,162	2,212	2,262	
23	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59	61	63	65	67	69	71	73	75	77	79	81	83	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	
23	21	25	29	33	37	41	45	49	53	57	61	65	69	73	77	81	85	89	93	97	101	105	109	113	117	121	125	129	133	137				



Table 9.--Dairy products removed from the commercial market by programs of the United States Department of Agriculture, 1949-70

Year and month	Removals 1/				Solids content of removals			
	Butter	American cheese	Nonfat dry milk	Milk equivalent	Milk-fat	Solids-not-fat	As a percentage of marketings	
	2/	3/	4/				Milk-fat	Solids-not-fat
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Percent	Percent
1949	111.7	25.5	325.5	2,489	100.4	321.1	2.6	4.6
1950	14.6	83.2	327.2	1,126	40.9	339.9	1.1	4.9
1951	5/-27.3	5/-7.1	35.3	5/-618	5/-24.0	31.5	5/	.5
1952	16.1	1.7	42.3	339	13.8	41.2	.4	.6
1953	355.2	302.5	597.1	10,200	387.5	668.9	9.7	8.6
1954	305.1	242.5	644.4	8,588	328.2	695.5	8.0	8.7
1955	162.0	141.3	534.7	4,685	179.6	558.0	4.3	6.8
1956	164.6	186.5	723.4	5,206	197.6	753.0	4.7	8.7
1957	172.5	240.6	825.2	5,870	222.1	867.5	5.2	9.8
1958	183.7	75.0	886.0	4,658	178.2	875.0	4.2	9.8
1959	123.7	57.2	830.3	3,214	123.8	815.6	2.9	9.1
1960	144.8	.3	852.8	3,101	122.6	819.8	2.9	8.9
1961	329.4	100.0	1,085.6	8,019	305.0	1,075.3	6.9	11.2
1962	402.7	212.9	1,366.1	10,724	402.4	1,399.0	9.1	14.3
1963	307.5	110.9	1,219.2	7,745	291.8	1,210.1	6.7	12.3
1964	295.7	128.5	1,168.8	7,676	287.6	1,166.9	6.5	11.6
1965	241.0	48.6	1,078.4	5,665	217.4	1,074.0	5.0	10.8
1966	25.1	10.8	365.8	645	26.2	355.5	.6	3.7
1967	265.1	180.5	686.9	7,427	276.3	719.1	6.6	7.5
1968	194.8	87.5	557.8	6/5,159	6/193.2	6/575.4	4.7	6.0
1969 7/								
Jan.	19.5	0.2	42.7	420	16.1	41.3		
Feb.	25.3	---	43.3	542	20.7	41.9		
Mar.	20.0	3.0	46.2	459	17.4	45.6		
Apr.	27.6	12.3	26.2	716	26.5	29.5		
May	39.5	4.8	42.6	924	34.7	45.3		
June	22.2	---	49.6	500	19.2	50.2		
July	21.9	---	42.5	470	17.9	41.1		
Aug.	5.3	---	34.9	163	6.4	37.9		
Sept.	.4	---	29.2	48	2.0	31.5		
Oct.	3.6	---	12.5	114	4.3	15.2		
Nov.	2.1	1.9	14.6	88	3.4	16.8		
Dec.	.5	5.5	22.9	83	3.0	25.2		
Total	187.9	27.7	407.2	6/4,527	6/171.6	6/421.5	4.2	4.4
1970 7/								
Jan.								

1/ Delivery basis, after unrestricted domestic sales. 2/ Includes butter equivalent of anhydrous milkfat, PKM, and purchases under Sec. 709. 3/ Includes purchases under Sec. 709. 4/ Includes PKM certificates issued. 5/ Domestic sales exceeded purchases. 6/ Includes evaporated milk. 7/ Preliminary.





Table 10.—Stocks of dairy products, United States, end of year or month, 1960-69

Year and month	Commercial stocks					Government stocks					Total milk equiv- alent 3/
	Butter	Amer- ican cheese	Other cheese	Evapo- rated milk	Nonfat dry milk	Butter 1/	American cheese 2/	Nonfat dry milk	Evapo- rated milk		
						Million pounds					
1960	21.2	291.4	40.6	221.0	103.1	55.6	0.6	279.8		5,392	
1961	19.5	366.4	53.0	225.1	132.5	205.3	53.5	354.9		9,902	
1962	31.2	307.1	37.8	141.4	99.0	328.2	79.1	576.0		12,166	
1963	32.1	282.7	39.1	131.7	81.5	239.0	39.1	404.6		9,691	
1964	37.1	271.9	42.3	185.3	108.8	33.8	24.4	65.5		5,294	
1965	27.1	270.2	37.6	134.8	58.2	25.0	.3	96.2		4,458	
1966	30.2	322.1	50.4	192.9	118.2	2.1	.2			4,658	
1967	18.4	302.3	46.2	190.2	98.7	150.2	80.8	157.6	5.6	8,252	
1968	14.5	291.1	62.3	99.1	79.0	102.9	51.6	198.7	42.9	6,708	
1969	18.5	264.6	53.8	105.0	85.4	70.1	1.3	137.8		5,361	
1968											
Mar.	18.9	269.5	47.9	78.1	77.0	157.5	63.9	193.2		7,749	
June	35.9	338.2	50.6	149.1	147.7	189.0	54.6	228.8		9,626	
Sept.	29.1	339.6	71.2	189.0	106.3	167.5	60.3	232.8	.9	9,251	
Dec.	14.5	291.1	62.3	99.1	79.0	102.9	51.6	198.7	5.6	6,708	
1969 4/											
Mar.	19.9	243.7	54.9	53.7	63.9	101.4	22.0	205.3	.9	5,909	
June	41.8	297.6	59.1	151.6	137.1	153.5	21.3	203.7	5.4	8,338	
Sept.	33.9	305.7	60.3	194.6	130.4	121.4	7.0	209.1	27.1	7,501	
Dec.	18.5	264.6	53.8	105.0	85.4	70.1	1.3	137.8	42.9	5,381	

1/ Includes butter equivalent of butteroil and ghee, 1962-65. 2/ Includes process cheese held by USDA beginning May 1967. 3/ Includes manufactured products for which current monthly series are available (excludes nonfat dry milk). 4/ Preliminary.





Table 11.--Dairy products: U.S. imports, quota and non-quota products, 1968 and 1969 1/

Product	Quota		December		Annual	
	calendar year 1969	1968	1969	1968	1969	1969 as a percentage of 1968
	Thou. lb.	Thou. lb.	Thou. lb.	Thou. lb.	Thou. lb.	Pct.
<b>Cheese, quota types</b>						
American-Cheddar	10,037.5	3,005	1,513	9,841	9,605	98
-Other 2/	6,096.6	2,091	2,447	5,850	6,034	103
Italian-Original loaves	11,500.1	1,633	1,280	8,390	10,267	122
-Other	1,494.0	447	53	1,852	1,742	94
Edam and Gouda-Natural	9,200.4	795	[1,671]	8,626	[11,457]	[54]
-Processed	3,151.0	200	640	12,760	12,760	101
Blue mold	5,017.0	335	1,612	4,822	4,878	101
Swiss-Emmentaler, 447 1/2	4,271.0	[1,698]	606	[38,853]	16,732	[52]
-Emmentaler, 47 1/2	3,289.0	[500]	950	[19,977]	9,525	[63]
-Gruyere-process, 447 1/2	25,001.0	[3,486]	4,439	[39,377]	18,317	[115]
-Gruyere-process, 47 1/2	12,027.6	14,191	2,980	3/26,867	3/26,867	81
Other, 447 1/2			18,282	150,358	121,907	81
Other, 47 1/2						
<b>Total</b>						
<b>Cheese, non-quota types</b>						
Pecorino		2,639	2,305	17,352	19,227	111
Roquefort		254	220	1,948	2,061	106
Other 4/		45	92	767	622	81
<b>Total</b>		2,939	2,617	20,067	21,910	109
<b>Other quota products</b>						
Butter	707.0	59	29	740	677	91
Butterfat	1,200.0	---	---	1,200	1,200	100
Butterfat mixtures	2,580.0	500	135	1,882	2,741	146
Frozen cream	12,540.0	2,170	1,013	12,605	14,750	117
Dried skim milk	1,807.0	186	67	1,747	1,914	110
Dried buttermilk	496.0	45	10	536	173	32
Evaporated milk	1,312.0	602	61	4,909	1,513	27
Condensed milk	4,079.0	21	153	4,854	4,657	84
Chocolate crumb	17,000.0	4,614	1,756	45,337	18,603	41
<b>Non-quota products</b>						
Ice cream		---	---	---	20,264	---
Casein		12,835	11,732	116,100	116,108	100
Milk equivalent, fat solids basis, total all products	5/	193,834	224,720	1,780,195	1,621,003	91

1/ Preliminary. 2/ Includes Colby. 3/ Includes 6.2 million pounds entered into bond in 1968 and withdrawn in 1969.

4/ Gjetost, Bryndza, and Camembert and Neuchâtel. 5/ Milk equivalent of import quotas for dairy products, 946 million pounds.



Table 12. Dairy product exports, annual 1960-67,  
by months, 1968-69

Year and month	Butter 1/	Cheese	Evapo- rated milk	Con- densed milk	Dry whole milk	Nonfat dry milk	Malted milk	Infant and die- tetic foods	Milk equiv- alent
- Million pounds -									
1960	8.0	9.1	101.5	41.9	28.1	446.7	2.9	16.3	776
1961	6.7	8.8	92.3	47.3	17.5	734.2	2.9	19.1	655
1962	34.9	19.1	66.3	47.7	13.4	873.6	2.1	16.0	1,287
1963	192.5	33.6	65.5	56.6	29.8	1,119.2	2.3	18.0	5,036
1964	296.5	9.1	37.3	62.8	12.3	1,310.9	2.6	18.6	6,872
1965	65.7	6.8	24.7	65.8	18.6	863.4	2.7	16.0	1,836
1966	13.7	6.0	38.4	94.3	15.6	387.7	2.5	16.5	778
1967	2.9	6.4	33.8	29.2	11.9	409.0	1.4	17.2	363
1968 2/									
Jan.	.1	.5	3.3	.9	1.1	20.2	.2	1.0	29
Feb.	3/	.5	2.3	1.6	.7	20.8	.3	1.0	25
Mar.	.1	.5	2.5	2.7	1.4	31.9	.1	1.1	37
Apr.	2.5	.5	3.9	4.7	.7	26.7	.1	1.9	91
May	7.6	.6	2.5	1.3	1.1	54.1	.1	1.5	197
June	8.6	.5	1.7	2.4	.6	28.8	.2	1.7	211
July	1.4	.5	3.2	6.5	1.6	26.6	.1	2.1	78
Aug.	2.5	.6	1.7	6.0	1.4	46.2	.1	1.7	99
Sept.	.2	.8	2.8	2.7	.9	42.4	.3	2.3	44
Oct.	2.0	.4	3.1	6.1	6.6	36.3	.3	1.0	126
Nov.	5.1	.8	2.7	1.6	1.0	36.2	.3	2.1	146
Dec.	2.1	.6	3.1	6.0	.3	26.6	.2	1.0	79
Total 4/	32.2	6.8	32.7	42.5	17.2	397.1	2.2	18.5	1,162
1969 2/									
Jan.	3/	.4	3.7	1.0	.6	21.1	3/	.6	24
Feb.	.1	.5	2.9	.9	1.1	21.5	.1	.5	28
Mar.	3/	.8	4.0	3.5	1.4	27.2	.2	1.6	44
Apr.	1.4	.5	2.2	4.5	2.1	41.4	.1	1.3	75
May	10.2	.6	2.9	7.4	1.4	32.6	.2	3.3	270
June	9.0	.5	2.4	6.1	1.5	41.8	.1	1.6	237
July	3/	.4	4.2	4.5	1.2	19.7	3/	1.5	39
Aug.	3/	1.7	2.0	4.0	1.3	23.7	3/	1.3	47
Sept.	3/	.4	2.8	8.2	1.1	15.9	.1	1.3	43
Oct.	3/	.6	4.2	7.0	1.2	36.9	.1	1.5	50
Nov.	3/	.4	3.4	4.5	.4	26.8	.1	1.4	33
Dec.	.1	.5	2.4	.6	.6	20.6	3/	.9	21
Total 4/	20.8	7.3	37.1	52.2	13.9	329.2	1.0	16.8	911

1/ Includes butter equivalent of butteroil, ghee, and anhydrous milkfat.

2/ Preliminary.

3/ Less than 50,000 pounds.

4/ May not add due to rounding.



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UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

THE EXTRA COST OF BEING POOR

Talk by Trienah Meyers  
Staff Assistant to the Administrator  
at the National Agricultural Outlook Conference  
Washington, D. C., 3:00 p.m., Wednesday, February 18, 1970

In one way, I'm a fine one to be up here talking to you about the extra costs of being poor. Like most of you, I sit at a reasonably comfortable rung on the economic ladder, and the only times I miss meals are when my plane is late or misses connecting flights. When I was asked at the White House Conference on Food, Nutrition and Health a couple of months ago to limit myself to \$2.50 a day for food as part of the demonstrations, I declined. I couldn't honestly do that without feeling like a hypocrite--playing at being poor for a few meals, while I attended meetings in one of the more elegant hotels in Washington.

On the other hand, if persons like you and me don't talk a little louder and considerably more frequently and coherently about poverty than we have in the past--there can be some dire consequences. For one thing, if we wait too long no one is going to be able to hear us above the growing roar at the bottom of the ladder. You should have heard the roar at the recent White House Conference on food. More important, though, the more people like us get ourselves involved, the more likely it is and the quicker it will be that the national body will gain some real leverage on the problems of poverty.

The Economic Research Service does get some exposure to conditions of the poor--the most recent is in the context of the evaluation of the Expanded Food and Nutrition Education Program. In this program, FES has over 5,000 indigenous aides, with special training and supervision provided through the Land Grant Colleges and Universities, seeking out and teaching the culturally deprived on matters relating to nutrition. As of last count, they were

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This speech is based in large part on materials developed by Miss Edna Jones, Senior Analyst, Datagraphics, Inc., Allison Park, Pennsylvania.

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working with more than 150,000 poor families. Those who evaluated the program at the grass roots observed that this educational system is--appropriately--working two ways. New insights and understandings about poverty are indeed seeping all the way up through the establishment.

I'd like to share with you on the basis of our most recent observations and reports some concepts about the cost of being poor that are not generally thought of, about the interactions among these costs, and finally, about what promises to function best as leverage for change.

Franklin Roosevelt, in his memorable "four freedoms" speech to Congress on January 6, 1941, didn't mention "economic freedom" per se, but the Nation's thirty million poor have infinitely less economic freedom than their more affluent countrymen. Not only does the poor consumer have less money to spend, but his discretionary freedoms of time, place, quality, amount, and mode of purchase are severely restricted. Let's look at each of these facets of consumer inflexibility for the poor. Oh, and I'm not talking about general buying. I'm talking about necessities for an individual's or a family's well-being. In many instances the poor are paying more for the very necessities of life than the rest of us.

For example, time of purchase is an extremely important determinant of the cost of most items. The "thrifty" consumer can use fluctuations in prices to good advantage. End-of-season clothing sales are representative of the sort of saving which can be realized. The seasonal variations, even the weekly "specials" in food prices are another, particularly where the consumer has a home freezer. But the poor consumer can take little, if any, advantage of these possible savings. While the buying habits of the more affluent members of the buying public are determined at least partially by convenience, those of the poor are dictated almost exclusively by an existing need. Of what use is a sale on children's summer clothing in September, if the seat just gave way in Johnnie's only pair of winter school pants this week? "Poor" is trying to keep expenditures as near even with income as possible, and there is very little flexibility in this situation. How quickly a good budget plan is destroyed when even a small emergency cannot be met--when there are no savings to absorb the "bumps," only present income!

Let me tell you about a recent case. Some of the Expanded Food and Nutrition Education Program aides in a large eastern seaboard city became convinced that food retailers in their community were actually raising prices when welfare checks were distributed. Part of the aides' job is to help raise the nutritional level of their client families. Since increased prices would







measurably affect their clients' nutritional intake, they advised families to delay buying food until a few days after the welfare checks were distributed.

Now, I am not here to debate the existence of this situation--and our research indicates it is not a problem of national scale. The crucial point is that the aides failed almost completely in their efforts to effect delays in food purchasing. This was NOT because of apathy on the part of the home-makers--they honestly believed that prices were being raised--the families simply could not wait. Most of them had already been waiting--for a welfare check. In this instance, aides were suggesting only a few days' delay in buying. Can you imagine the effectiveness of telling a poor family that buying clothes a half-year ahead of time will save them money? "Poor" is buying when you can.

Where one buys items can also have a distinct effect on how much these items cost, and again, the poor consumer has little control over where she spends her money. Dr. Joseph Uhl at Purdue, in reporting to economists on his studies of buying, commented recently that American education is producing scientific geniuses and illiterate consumers. Most people, particularly the affluent, know that prices on equivalent items often vary widely from store to store. Whether or not they make use of the information, they at least have the freedom to do so. The suburban purchaser can leave the children with a babysitter and take off in the car for whatever store has the best buy. She can classify her needs by purchase type--greens at one market, eggs at another, or draperies at one end of the city and appliances at the other. Not so the poor. No babysitter, no car, no bus or taxi fare--in short, no freedom. The poor are somehow fenced into a small geographical purchasing area by economic and psychological barriers. This is particularly true of the rural poor, but it also applies in large metropolitan areas. "Poor" is buying in the neighborhood, at whatever the prices happen to be.

The poor are particularly vulnerable to the door-to-door salesman. In a rural county in the South, for instance, nutrition aides reported on an enterprising appliance salesman who managed to sell home freezers to a number of poor families who had only recently obtained electricity for their houses. His primary selling point was that the families could prepare many foodstuffs for freezing and thus keep them throughout the months in which these foods were not grown or sold. The salesman was, of course, correct in this statement. But somehow the purchasers received the impression that the freezers could be used as substitutes for refrigerators. Their first experiences with trying to freeze such things as lettuce, cabbage, and butter were, needless to say, somewhat disappointing.



It is not clear in this case whether the salesman had deliberately tried to victimize the people, although the possibility must be admitted. Whatever his intentions, the results were clear--families who bought the freezers were saddled with payments plus the need for another major appliance.

One of the most talked about areas in consumer-producer relations is product quality. We are all familiar with the growing outcry against the philosophy of planned obsolescence and shoddiness of manufacturing. I would bet if we took a survey in this room we could come up with quite a list of personal experiences with non-toasting toasters, cars which shed their parts like molting canaries, radios that go snap, crackle and pop--and television sets that seem to be dependent upon monthly visits by servicemen for their existence. Some of us can afford to buy insurance for repairs on major appliances--the poor cannot.

Another aspect of quality also has a bearing on the value of products to the consumer. I shall borrow a phrase from the military-industrial world and call this aspect "cost/effectiveness." If, for instance, a \$4.00 pair of shoes lasts only two months, and a \$16.00 pair of shoes lasts for 18 months, which is really cheaper? The answer is obvious. There is often, although by no means always, a positive relationship between the cost of an item and its relative quality. The discriminating consumer can learn to take advantage of this situation by buying items which are of sufficient quality to wear well, but not so expensive that the benefit of buying them is outweighed by their cost. Again, however, this avenue is seldom open to the poor consumer. His lack of financial flexibility forces him to buy only what he can immediately afford. Even if he is aware of the advantage of buying a more expensive brand or item, he cannot take advantage of the knowledge. "Poor" is buying whatever quality shoes and trousers you can manage on your time payments.

Buying in bulk is another way in which household costs may be kept down. Not only are many items discounted when purchased in comparatively large quantities, but taking advantage of sales by buying extra amounts of sale items is an excellent way to decrease the amount spent on staples. We teach this constantly. The poor are not able to exploit the benefits of bulk buying. If a mother has to feed a family--she cannot forego buying milk in order to purchase five extra cans of beans which happen to be on sale at six for a dollar. So, "poor" is buying in amounts you can afford--usually one at a time--and not being able to take advantage of the "twofers and threefers."

Many years ago a famous man expressed this quite effectively in a single sentence. He said, "The poor can't afford to be frugal."



In general, very poor people have almost no flexibility in the method by which they pay for their purchases. Without any collateral, and with the condition of poverty as a given, it is difficult, if not impossible, for many families to obtain credit. This closes the door on the possibility of using most of the avenues of cost/effective buying about which I have been talking. When they can get credit, it often works against them by enmeshing them in a financial web which they often do not understand and are powerless to control. Credit to the affluent is often a payday to payday convenience: to the poor, it is usually a long haul leading to a far higher cost per item than you or I would pay. "Poor" is paying more interest on credit terms because it takes longer to pay. And as an additional cost of credit, think how quick, easy, and cheap it is for us to pay our bills. If we keep a minimum balance in our checking account, the check costs nothing and it takes us very little time to pay our bills. We sometimes even get the envelope free and just add a 6-cent stamp. Without this convenience, the poor must make a special trip to each store in which they have payments to make--spending busfare and considerable time. They could send a money order--but that costs money and a trip to a post office which is not always close.

The poor and, to a lesser extent, the American people in general, are also hampered by inadequate consumer education and sophistication. While the aspects of buying previously discussed comprise a considerable portion of consumer sophistication, there are other considerations. Through a lack of acquaintance with merchandising and advertising techniques, the poor consumer is often led to purchase inappropriate merchandise. I noted earlier that the poor are particularly vulnerable to door-to-door salesmen. Salesmen rarely come in response to expressed needs of the consumer, and even less often in response to the real needs of the poor. For example, the evaluators observed in one county that a number of homes had the same gilt-framed picture of a martyred hero. Homemakers reported that they were paying a salesman \$25 on time--for a picture which the program evaluators estimated might have cost \$2.98 at a retail store. While the picture was probably a psychological necessity, that price tag was quite out of proportion to its worth. This episode might not have occurred if the purchasers had known more about buying and had more experience in what was available in regular retail stores. Unfortunately, the people who are likely to be hurt most by a lack of knowledge are the very ones who are least likely to be able to acquire such knowledge. Because of their history of limited buying power, lack of consumer mobility, and inflexible finances, they have little opportunity to acquire the purchasing sophistication of more affluent consumers. And, since poverty has in many cases become institutionalized, poor people are not likely to learn these skills from their families.





There are a multitude of agencies and programs set up to help the poor. Some of the most important are the various food assistance programs. When they work well, these programs accomplish at least a large portion of the desired outcome---improved nutrition for the poor and the release of a portion of their income for other kinds of expenditure. Yet, even in these programs, situations sometimes conspire to rob the poor of the advantages gained from participation. In a rural area, the nutrition aides reported an incident of a woman who was feeding the oatmeal from her commodity food program to her hogs. She said she didn't like the oatmeal, and didn't know any way to prepare it so the family would eat it. Another family had painted their shed with a mixture of water and commodity powdered egg mix. No one in the family knew how to read well enough to decipher the instructions on the tin. The indigenous aides in the nutrition program have been particularly effective in situations like this, since they can generally find the underlying causes for misuse or failure to use food assistance. The nutrition aides report that without special instruction and a chance to taste commodity items such as bulgar, poor people just don't understand how to use foods they've never known before. The fact that you and I pay \$0.85 for bulgar under a different name doesn't mean a thing to them. For the thousands who aren't reached by the nutrition education aides, such problems can nullify the potential of food programs.

Up to this point, I have been talking only about economic matters. But there are other costs to being poor. Some of these are inextricably interwoven with the economic costs of poverty; some are indeed the result of poverty; but all are degrading.

There is an entire spectrum of educational, psychological, and physical costs which may attend the condition of poverty. The fact that a third of the adults in Marengo County, Alabama failed to complete more than three years of education is a statistic few people have on the tips of their tongues. Its meaning in terms of the well-being of the people is known to even fewer. The coincidence of mass low education and poverty marks ignorance as an added cost of being poor--all the prattling about equal education to the contrary.

It has been estimated that as much as 60 percent of the Nation's ghetto population may be emotionally unstable enough to require professional care. Eminent psychiatrists have pointed out that although the incidence of severe psychosis among some poverty groups is high, the treatment of poor psychotics has lagged far behind that of the more affluent members of society. Whereas the relatively well-to-do generally receive treatment by private psychiatrists or in clinics, the poor are treated in hospitals. In addition, poor people generally do not receive the individualized care usually afforded to the





wealthier patients. They are much more likely to receive electroshock and drug therapy, rather than the more costly individual psychotherapy. The reasons behind this condition are largely economic, but not wholly so. It has been noted, for instance, that psychiatrists in general have failed to comprehend the kinds of problems and situations to which poor people are exposed. The psychiatrist attempts to treat mental aberration from his own socio-economic point of view, without developing the rapport and understanding necessary for effective therapy (Man Against Poverty: World War III).

Perhaps a more basic issue than the lack of adequate psychiatric care for the poor is what makes ghetto dwellers develop mental and emotional aberrations in the first place. This is a difficult area to grapple with, since interpretations of the causes are many and varied. Yet, it does not take a great deal of insight to isolate a few potential causes--hopelessness, joblessness, fear, and frustration. I will leave specific interpretation to more qualified personnel, but surely a society which bombards its members with messages that cars, homes, electric ranges, hair dressings, and the "right" deodorant are all prerequisites for success and happiness, and then manages to exclude a significant number of its members from participating in the quest for these things cannot expect only good to come from the situation. Can we rationally expect a housewife who is afraid to step out of her apartment door because of the gangs who roam the halls of many urban housing projects to have the same confidence and trust in society as does the suburban homemaker? I think not.

The educational deficiencies of the poor are well known. In the inner cores of the Nation's large cities where poverty is rampant, schools are notoriously poor. The report of the National Advisory Commission on Civil Disorders takes note of the fact that "...ghetto schools have experienced overcrowding. Shortages of textbooks and supplies have developed. Double shifts are common; hallways and other non-classroom space have been adopted for class instruction; and mobile classroom units are used." The report also mentions several instances of seemingly discriminatory educational practices, with school overcrowding in areas with a high percentage of ghetto Negro enrollment being a much greater problem than in white or predominantly white schools. Our society also spends less money educating ghetto children than children of suburban families. The teachers in schools attended by disadvantaged Negro children tend to be less experienced and qualified than those in schools attended by middle-class white children. The ghetto schools also tend to have fewer facilities than those in more prosperous areas. This list of indictments of our educational practices and priorities could go on and on, but it tends toward overkill. Let's take a look at the results: the average black sixth-grader of a northeastern metropolitan area is, on the basis of



standard achievement tests, 1.6 grades behind his white counterpart. By the twelfth grade, this gap has widened to 3.3 grades. The black student is almost four times as likely as the white to fail the Selective Service Mental Test, and is three times as likely to drop out of school at ages 16 and 17. At least in urban areas, ghetto dwellers are clearly getting the short end of the stick (National Advisory Commission on Civil Disorders).

The extra costs of being poor are also physical. Many poor people exist under conditions which inexorably sap their energies and abilities to resist. Of the more than 2,000 homes on which our nutrition program evaluators collected data, roughly one-third did not have running water. Many of the poor families did not sit down together for meals because there was not sufficient room or furnishings. Can you imagine the energies that go into homemaking under those conditions? "Poor" isn't lazy; it's just very tired and often ill.

The extra costs of being poor, then, are not only economic--they are also psychological, educational, and physical. Clearly these are not independent costs. In fact, there is an almost insidious interrelationship creating an entrapment that might lead one to conclude that the only means of reducing the costs of being poor is to be rich. The recommendation made at the White House Conference for a \$5,500 annual minimum income for a family of four was a thought in that direction--but that alone will not solve many of the problems I have cited here, even if such federal expenditures were feasible.

When one looks in depth at the nature of the costs of being poor and looks across the effectiveness and ineffectiveness of poverty programs of the past couple of years, the importance of three separate types of leverage comes more clearly into focus.

The first and most far-reaching is educational leverage. Education has long-term effects. It also has a multiplier effect. Aides in the nutrition education program have observed this multiplier effect of education among homemakers--they find that what was discussed in one household, about low-cost meals, sometimes is known to the lady down the block before the aide arrives at that home. Certainly education is generational within the family. What the mother learns about food preparation is learned by her children through example. The converse is undoubtedly true. What children learn in 4-H and in school is carried home and can influence parents. The same is true of all other facets of education of the poor. To educate one person in Marengo County, Alabama beyond the fourth grade enhances the probability



that several others will aspire to more than a fourth grade education. And, although the delivery costs of education are high, the maintenance costs are close to zero dollars. Once the concepts are incorporated by the learner, she or he has them at their disposal from that time on.

The second approach is through economic leverage. Economic leverage has potential for what we might call positive regenerative feedback. That is, each dollar added to a poor person's income can reduce the added costs of being poor. The Food Stamp Program provides some of this type of leverage. Much more of this type of assistance is needed.

The third type of leverage is psychological or motivational in character. We have seen some of this kind of leverage coming into play in the recent nutrition conference, and more widely in the community action agencies throughout the country. The poor are becoming their own voice and the sound is penetrating the barriers of stereo-typing, moralizing, and philosophizing that have separated the other two-thirds of the Nation from them. Just to be heard is motivating.

On the optimistic side we do have hope--more importantly, "they have hope." Let me share with you some findings of a recent ERS study. A set of identical questions were asked of 1,249 heads of households in the Mississippi Delta Region--some poor, some affluent. Researchers wanted to discover if the poor were more pessimistic about their chances for bettering their lives than the affluent. It turned out they were. Did this pessimism block them from attempting to escape their economic plight? Surprisingly, it didn't stop them from trying. They were asked about willingness to take special training, change jobs, and moving to a distant city. Poverty status had no bearing on the response of the Delta residents to these questions. The persons most willing to take free training courses or make a 200-mile move were just as apt to be poor as affluent. But regardless of their financial status, these people were generally young rather than old, married more often than single, and Negro more frequently than white. Most headed up rather small families and had at least a sixth grade education.

The persons who showed the greatest reluctance to alter their lives were Negro female family heads. Many of these women were poor, but it appeared their family responsibilities hampered them more than poverty.

People in poverty have not seemed to fit well into the mythical mold of "the American way of life." The larger portion of the American public has tended to see poor people as beings apart from themselves. They see and



condemn the violence of the ghettos, but do not seek to understand the causes of the violence. They berate the poor for their alleged laziness and lack of initiative, yet do not seem sensitive to the reasons for their joblessness. For the upper two-thirds to really understand the lower third would be in itself a major psychological push forward.

I somehow have the feeling that any one of these three approaches, used alone, won't work. Certainly the leverage gained by the three in unison will be far greater than the sum of the three used independently. Together they tend to nurture one another, to have a synergetic effort. Or, to put it in the language of the poor, that would really bang it.





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

COST OF RAISING A CHILD 1/

Talk by Jean L. Pennock  
Consumer and Food Economics Research Division  
at the 47th Annual Agricultural Outlook Conference  
Washington, D.C., 3:45 P.M., Wednesday, February 18, 1970

What does it cost to raise a child? The answer to this question is another question--how much can you afford to spend?--for costs vary with standards of what is necessary and desirable. These standards are closely related to economic position. Today I shall be talking about costs for children with no more than 4 siblings in families whose level of living is such that their food expenditures are at the level of the Department's low-cost food plan.2/ Very shortly we will also have available estimates at the levels of the moderate-cost and economy food plans.

Using the food plans is one way of setting the economic level in which our hypothetical child lives. For those of you who may not be familiar with the Department's food plans,3/ let me take a moment to describe them and explain their use in this research. They are at four cost levels--economy (the lowest), low-cost, moderate-cost, and liberal. Each provides a guide for estimating the quantities of foods needed for individuals of specified age and sex. Costs for individuals are estimated periodically. These costs can be combined to estimate costs for families of varying size and composition. On the assumption that groups of families that are eating at the same level are living at the same level, the budgets can be used to bridge differences in family size and composition to locate families at comparable levels of living.

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1/ This paper follows up work reported at the November 1966 Outlook meeting by Lucile F. Mork. As in the earlier work, the methodology was developed by the author, with Carol M. Jaeger, Minnie Belle McIntosh, both formerly with the Consumer and Food Economics Research Division. Dr. J. Patrick Madden, Associate Professor Agricultural Economics, Pennsylvania State University, suggested the regression equation used.

2/ As this paper was being prepared it was discovered that a programming error invalidated estimates for the farm child in the West. Corrections could not be made in time for inclusion in this paper and consequently estimates for this child have had to be omitted.

3/ The plans are described in detail in HERR 20, Family Food Plans and Food Costs, and in CA 62-19, Family Food Plans Revised, 1964, both USDA publications. Prices are published quarterly in Family Economics Review. Modifications made in the pricing of the plans for this research are described on p. 6.



## Estimates in constant vs. current prices

The data we used to derive the estimates of costs of raising a child came from the 1960-61 Survey of Consumer Expenditures conducted jointly by USDA and the Bureau of Labor Statistics. As a result our first estimates are in terms of 1960-61 prices (table 1). Such estimates have little more than historical interest in 1970, in view of a price rise of 23 percent from 1961 to 1969. Consequently we have updated the costs to 1969 prices (table 2). We have also computed costs for a child born in 1951 and reaching age 17 in 1968 so as to reflect the price changes that occurred during his childhood (table 3). The index numbers used in computing prices in tables 2 and 3 are given in table 4 so that costs for a child of any age can be computed in prices of any year between 1951 and 1969.

Whether you will want to use the estimates presented in constant dollars--that is, costs for all ages in prices of a specified year--or in current dollars--prices varying with the year--will depend on the use you plan to make of them. The data in constant dollars are pertinent when allowances for present costs are being considered. Persons in welfare programs determining allowances for the support of dependent children will want data for each age as nearly in today's prices as possible. So will lawyers and courts when support for children is being adjudicated. So will researchers when they are considering the present costs of supporting the youth of the country or of a segment of the population. But the lawyer and court considering the past costs met in raising an individual child will want the costs in current dollars to reflect prices throughout the child's lifetime. So will the researcher interested in past costs of a cohort of individuals.

First, let us consider costs in 1969 dollars. At the low-cost level we are dealing with in this paper estimates for the first 18 years of life range in constant dollars from \$19,360 for a rural nonfarm child in the North Central region to \$25,000 for a rural nonfarm child in the West. These costs compare to costs ranging from \$15,800 to \$20,190 for a child born in 1951, computed at the prices current in each year through his childhood. Here also the extremes are a North Central rural nonfarm child and a rural nonfarm child in the West.

## Proportion of family income required per child

There are many differences between costs relating to where the child lives, but some generalizations are possible and of interest. Over the 18-year span we are considering, costs per child in constant dollars at the time of the survey--1960-61--consumed from 15 to 17 percent of family income (table 5). The percentage is lowest for the farm child in the Northeast and North Central regions. There income has to be spread to cover somewhat more children than elsewhere.

## Variation by age of child

Even without taking into account the effects of price change over the life



span of the child, total costs per year generally rise as the child grows. In 1969 dollars, costs in the eighteenth year are about 30 to 45 percent higher than in the first year.

Price changes over the life of a child may increase the variation in annual costs. Consider, for example, the child born in 1951. In that year and the next, you may remember, the Korean crisis caused a sharp rise in prices. Subsequently food and clothing prices dropped somewhat, but by 1957 average prices for the goods and services we have grouped together in our tabular presentation were all back to the 1951 levels or higher. Since then the trend has been generally upwards, and the rate of increase has been accelerating in recent years. As a result, the costs in the child's eighteenth year, in 1968 dollars, are about 75 to 95 percent higher than the costs in his first year, in 1951 dollars. This is more than double the difference in constant dollars.

Costs do not all rise at the same rate over the life span of the child. The increase is sharpest in clothing and food, categories for which we have the best basis for estimating individual costs--in food from the food plans and in clothing from the reports for individuals in the survey.

In other categories of consumption, the survey is limited to data on expenditures for the family as a whole. Data from another survey have been used to determine the proportion of family expenditures for medical care to be assigned to the child.<sup>4/</sup> Lacking information on the shares of housing, transportation, and miscellaneous goods and services used by each family member, we have given the child his per capita share of these categories, making no distinction on age although there is some inequity in this procedure. The infant and the teenager do not require equal amounts of transportation, for example, yet we assign them equal shares of the family costs.

When costs are assigned on a per capita basis and family expenditures do not vary in proportion to family size, costs per child can be expected to decrease through the years when family size tends to increase and to turn upward again when the child is a teenager and has fewer brothers and sisters at home. This pattern is evident in transportation but is most marked in housing.

Food and clothing costs also increased more than other costs between the child's first and eighteenth year when costs are expressed in constant dollars. Price changes between 1951 and 1968 in food and clothing were less than in other categories but not enough less to counterbalance the relative changes in real or constant-dollar costs.

#### Relative importance of the categories

A pattern in the way total costs are distributed among the categories of consumption is easily discernible in the estimates by region and urbanization.

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<sup>4/</sup> For more detail on the computation of costs for medical care and other categories of consumption, see pp. 9-10.





Housing generally takes a larger share than any other category over the child's first 18 years--up to 30 percent of the total. Food is a close second to housing and exceeds it among Northeast farm and urban children. Clothing and the residual category that includes recreation and personal care each take roughly the same proportions--usually 10 to 12 percent. Transportation takes somewhat more. The smallest proportions are used on medical care--4 to 6 percent--and education--about 1 percent.<sup>5/</sup>

### Rural-urban differences

The opinion is rather widely held that rural people can live more cheaply than city people. It has been suggested, however, that when we expect farm people to live at less cost we frequently also expect them to live less well. In this study we have attempted to hold levels of living constant, measuring costs as the value of goods and services used without regard to whether they were purchased or home-produced.<sup>6/</sup>

We find that when levels of living are held constant, there is little difference in costs for the farm, rural nonfarm, and urban child in the South. Costs for the urban child are appreciably higher than for the two rural children in the North Central region, but in the Northeast and West the rural nonfarm child has the highest cost. Food and housing costs of the urban child are generally higher than these costs for a rural child in the same region. His transportation costs are generally lower.

I would like to be able to tell you what part of these differences between requirements for farm, rural nonfarm, and urban children result from the choices families make because of differences in needs and preferences and how much from variation in price levels. However, we worked from expenditure data in which it is not always possible to determine the quantities consumed and never possible to determine whether items bought by farm and nonfarm households were of like quality.

I mentioned a moment ago that we have attempted to hold level of living constant. Because it is harder to do this between farm, rural nonfarm, and urban situations than between regions of the country, perhaps this is the point at which I should tell you something about our procedures and assess our success.

As I said earlier, we are proceeding on the assumption that families who are eating at the same level of adequacy are living at the same level of adequacy in other respects. In other words, we are assuming that family spending is "of a piece" across the areas of consumption--that families will apply the same standards in all areas of spending.

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<sup>5/</sup> Any college expense that may have been incurred before age 18 is not included. For a more detailed explanation of the derivation of the estimates for education, see p. 10.

<sup>6/</sup> Goods and services received as gift or pay, except food and housing received as pay, are not included in the analysis. For treatment of home-produced food, see p. 8.





We must recognize, however, that the goods and services families buy are only one factor in determining levels of living. Goods and, more frequently, services furnished by the community also are a part of level of living but are not included in our basic data. A few differences in the level of community services may be reflected in the level of family spending, many will not be. If school systems do not provide free school books, families must. This may be one explanation for higher education expenses among southern farm families. If free libraries are not available, families may buy more books and keep up their level of living. On the other hand, they may read less and be at a lower level of living. If government does not provide police protection, few families will be in a position to buy it privately and their level of living will be reduced. But as long as we are concerned primarily with the out-of-pocket costs of families, inequalities in community services are of little moment.

Of more importance than inequalities in community services to our thesis that families eating at the same level are living at the same level is the implicit assumption that all goods and services are equally available to all families, without cost differentials, and that differences in selections made are based only on differences in needs and preferences. This is not universally true. While price differences are believed to be decreasing, some still exist. Location also accounts for some differences in costs that are not true price differences. A farm family, for example, may have to pay mileage costs in addition to the standard fee for a physician's house call. And a farm family will usually have to pay for room and board when a child attends college, whereas many city children can live at home while attending college. On the other hand, the city child may have to spend money to reach and enjoy the fresh air and open space that constantly surrounds the farm child at no cost. The pressures of population also result in the urban family paying more than the rural family for comparable housing. In any of these instances the family facing higher costs may decide to buy less of the commodity and more food. On the other hand, the family facing lower costs may put some or all of the money saved into more food. In both cases, the relation between food and other consumption is distorted and our thesis that families eating at the same level are living at the same level is not universally true. However, it is probable that these distortions average out to some extent when families are grouped together.

### Regional differences

There are considerable differences among the regions in the absolute level of the estimated cost of raising a child and no consistent pattern in these differences. Regional differences are greatest for the rural nonfarm child. For this child, the highest estimate, for the West, exceeds the lowest estimate, for the North Central region, by almost 30 percent. The distribution of costs among the categories of consumption, on the other hand, shows few regional differences. Most noteworthy is that food tends to take a high and transportation a low proportion of total costs in the Northeast.

### Methodological statement

As some of you will remember, we presented estimates of the cost of raising a farm child in the North Central region and the South on this program in



November 1966. My presentation today would not be complete without discussing briefly the changes we have made in our methodology and the differences they have caused in the two sets of estimates.

First, let me review our use of the food plans--specifically the low-cost plans. The low-cost plan, as published in CA 62-19, Family Food Plans Revised, 1964, and priced for the four regions annually in Family Economics Review, suggests amounts of 11 groups of food that together provide an adequate diet. The difference in the cost of food in the four regions comes about partly because in pricing the plans choices of foods in each food group are based on the food habits of the lowest third of families in each region. In the South this is a lower income level than in the other regions. If we are to use the cost of the food plans to locate families at a constant level of living we cannot permit differences in income to affect food choices and determine, even in part, the cost of the plans. We have therefore used one set of food choices--the U.S. nonfarm average--and priced them in the same income class throughout. By this procedure we have eliminated as far as possible differences attributable to differences in income level. The remaining cost differences between regions and urbanizations are largely attributable to variations in price levels. These price differences, of course, must be taken into account in locating families at the same level of consumption.

Pricing the U.S. average nonfarm choices in all regions and urbanizations brings the costs of the food plans closer together both across regional lines and as between farm, rural nonfarm, and urban areas. And of particular importance in explaining differences in our 1966 and present estimates of the cost of raising a farm child in the North Central and Southern regions, this procedure reverses the relation of the food plan costs for North Central and Southern farm families at the low-cost level. Whereas in the 1966 computations, costs in the South were lower, they are now higher than in the North Central region. These changes can be illustrated in costs per week for the low-cost food plan for the usual budget family of four, a husband and wife aged 20 to 34 and 2 children aged 7 to 9 and 10 to 12. The pricings used in 1966 and in our present computations, both in 1960-61 dollars, are:

	<u>Used in 1966 computations</u>		<u>Used in 1970 computations</u>		
	<u>Rural farm</u>	<u>Rural nonfarm and urban</u>	<u>Rural farm</u>	<u>Rural nonfarm</u>	<u>Urban</u>
North Central	\$21.30	\$25.40	\$22.30	\$22.80	\$25.10
South	18.50	21.00	22.70	22.90	22.90
Northeast	23.90	26.80	25.60	25.50	26.00
West	23.10	27.20	24.30	25.70	26.30

Principally as a result of the reversal of the relative positions of costs of the North Central and Southern low-cost food plans, the relative positions of our estimates of the costs of raising a farm child have also been reversed in the two regions. In 1960-61 dollars the old and new low-cost estimates are:

	<u>1966</u>	<u>1970</u>
North Central	\$15,010	\$16,010
South	13,270	17,830



Both the earlier and present estimates are based on regression analysis. In the earlier analysis, the estimate for each category in each region and urbanization was compiled from a series of nine regressions, each using data for that region and urbanization only and for one family type and usually one or two family sizes. This procedure requires a very large sample and we would probably not have been able to develop estimates for the farm population in the Northeast, and the rural nonfarm population in the Northeast and West if we had stayed with it.

The present estimates are based on multiple regressions which utilize the data for all children in families of husband and wife, one to five children, and no other persons. It permits the introduction of tenure and age of the head of the family, pertinent variables not used in the earlier procedure.<sup>7/</sup>

The new equation forms, together with the changes in the level of the food plan costs have resulted in some changes in the make-up of our total cost figures. Because the level of total costs was raised somewhat in the North Central estimates and more so in the Southern, the proportion of the total taken by food has decreased in both regional estimates but more in the Southern. In the latter, there is also an appreciable decrease in the proportion going to transportation. In the South, these shifts are balanced principally by an increase in the proportion going to housing. In the North Central, the decrease in the proportion for food is balanced principally by an increase in the proportion for the miscellaneous category that includes personal care and recreation.

## Methodological Appendix

### Regressions used

Allowances for all the categories of consumption except food at home were obtained by a two-step procedure. As a first step, a proxy for the normal level of consumption was determined at the level of the low-cost food plan. As a second step, each of the categories was determined at the level of the proxy for normal level of consumption.

The regressions used were:

$$F = f(P, P^2, \underline{RU}, H, S, T, A)$$

$$X = f(P, P^2, \underline{RU}, H, S, T, A)$$

The terms are defined as follows:

F = food consumption defined as the sum of expenditures for food at home or to be carried from home, one-half of expenditures for food away from home except expenditures for school lunches, the value of meals received as pay,

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<sup>7/</sup> The regression equations used are discussed further below.





and 40 percent of the value of home-produced food. The adjustment to expenditures for food away from home was made to transform expenditures to a food-at-home basis for use in conjunction with the food plans in which it is assumed that all meals are from the home food supply. In the 1955 Household Food Consumption Survey the cost of a meal away from home was approximately twice the cost of a meal at home. Expenditures for school lunches were not similarly deflated because family expenditures meet only a part of the total cost. The value of home-produced food was reduced because analysis of data from the 1960-61 Survey of Consumer Expenditures indicates that 40 percent of home-produced food substitutes for purchases and 60 percent increases the level of food consumption.<sup>8/</sup> This adjustment is necessary because of the basic premise that families at comparable levels of living have comparable food consumption.

P = the sum of family expenditures for food (actual, not adjusted), clothing, housing, education, transportation other than automobile purchase, personal care, reading, recreation, tobacco, alcoholic beverages, miscellaneous family expenditures, gifts and contributions, and personal insurance. These are the categories of family outlay relatively unaffected by year-to-year variations in family income. Their sum is used as a proxy for the permanent or normal level of living in determining the average level of expenditure for the individual categories.

RU = region and urbanization.

H = tenure of the family home.

S = family size in year-equivalent persons.

T = family type. The data are limited to three family types. All are comprised of husband and wife, unmarried children, and no other persons. The distinction between types is based on the age of the oldest child--under 6 years, 6 through 17 years, and 18 years and over.

A = age of the head of the family.

X = , in individual equations, family expenditures for food away from home, clothing for children (by age of child), clothing materials and services, housing, medical care, education, transportation other than automobile purchase, automobile purchase, and all other.

In determining the value for P in specified classes F is set at the estimated cost of the food plan for the class. In determining the value for X, P is set at the value derived in the first equation. Estimates were developed for all family type-size classes in each region and urbanization on the basis of the known average age of the head and known age of the oldest child and assumptions as to the age distribution of other children.

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<sup>8/</sup> Pennock, J. L. "Home Production and the Family's Food." Family Economics Review. ARS 62-5, USDA, September 1966, pp. 13-14.





## Content of the categories

In one category of consumption, clothing, the survey data indicate the individual for whom the expenditures were made. We can, therefore, develop cost estimates tailored to specific age groups. In the other categories of consumption, however, expenditures were reported on a family basis. In these categories, except as noted in the discussion of food away from home and medical care, the child has been assigned his per capita share of the family's expense. These per capita cost estimates were developed independently for children in families with oldest child under 6 years of age, 6-17, and 18 and over, using the family size-type groups indicated above.

Estimates in tables 2 and 3 have been rounded to the nearest \$10 to avoid a false appearance of precision. Table 1, which is essentially a worktable, carries the data to the nearest \$1.

The estimated costs in the various categories of consumption were computed as follows:

Food.--The cost for food at home is the cost of the food plan for a child of the specified age to which adjustments have been made (1) for the economy of scale involved in family size, and (2) to compensate for the costs for meals and snacks away from home. The age intervals used are those of the food plans as published in 1961:

Under 1	4-6	13-15
1-3	7-9	16-17
	10-12	

No differentiation in costs has been made for sex. The costs in the age intervals in which the food plans differentiate between costs for boys and girls are averages of the food plan allowances for boys and girls.

The estimated cost for food away from home is the child's per capita share of expenditures for meals other than those at work, at school, and for snacks. It is assumed that no children in the age range we are concerned with were employed and so we allowed no meals at work. We also assumed that children under 4 years of age do not eat in restaurants. Because a meal bought away from home costs roughly twice as much as a meal at home, one-half the cost of meals away from home has been subtracted from the cost for food at home.

Clothing.--The estimated costs are derived from the actual expenditures for children in the following age groups:

Under 2	6-11	16-17
2-5	12-15	

To these has been added a per capita share of family expenditures for clothing materials and services.

Housing.--This category includes the cost for the family dwelling; fuel, light, refrigeration, and water; household operations; and housefurnishings and



equipment. The cost per child is a per capita share of the family's reported expenditures.

Medical care.--The family expenditures reported in the 1960-61 Survey of Consumer Expenditures were assigned among individuals on the basis of the variation in individuals' expenditures by age in a survey conducted as part of the National Health Survey.<sup>9/</sup> When the expenditures of persons 15 to 44 years of age are set at 100, the relatives are as follows for the income levels shown:

<u>Age</u>	<u>\$2,000-\$3,999</u>	<u>\$4,000-\$6,999</u>	<u>\$7,000 and over</u>
Under 15 years	39.8	45.5	51.3
15-44 years	100.0	100.0	100.0
45-64 years	156.5	143.2	141.7
65 years and older	197.2	159.1	197.4

The \$2,000-\$3,999 ratios were used. We have applied the ratios for under 15 years to 15-, 16-, and 17-year-olds rather than the ratio for 15 through 44. Other studies indicate that adolescence is one of the healthiest periods. Therefore the ratio for those under 15 seems more pertinent to this 3-year span than the ratio for 15 through 44 years, which includes the child-bearing years for women and the period in which the degenerative diseases begin to develop.

Expenditures for medical care vary greatly because of the irregular incidence of illness and accidents. In relatively small samples such as these estimates are derived from, the standard error of the average expenditure may be quite large. It is probable that any differences in the source data, resulting in different cost estimates, are not statistically significant.

Education.--Costs were estimated from the expenditures of families whose oldest child was 6 to 17 years of age. Inspection of a selection of questionnaires from the Survey of Consumer Expenditures showed that most of the education expenditures reported by families whose youngest child was under 6 were incurred for the husband or wife, while most expenditures in families whose oldest child was 18 years of age or more were for college education of these older children.

Transportation.---This category includes costs for the purchase and operation of automobiles and for public transportation. The child is assigned a per capita share of expenditures.

All other.--Included here are the child's per capita share of the family's expenditures for personal care, recreation, reading, and other miscellaneous expenditures. Children in the age groups with which we are concerned were assumed not to use tobacco and alcoholic beverages. They have been assigned no cost for insurance or gifts and contributions.

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<sup>9/</sup> Medical Care, Health Status, and Family Income, United States. Vital and Health Statistics, Series 10, No. 9, p. 45. U.S. National Center for Health Statistics, 1964.



## Adjusting costs for price change

Table 4 presents the percentage changes in prices between the base period and each year between 1951 and 1969 as measured by the Consumer Price Index (CPI). The base period for the urban data is 1960-61; for the farm and rural nonfarm data, 1961. Therefore, two sets of index numbers are shown.

Table 2, showing estimates of costs in 1969 prices, was produced by applying these index numbers to the 1960-61 values in table 1 and summing the results to obtain the total cost in each year of age. Table 3, showing estimates of costs for a child born in 1951 in the prices current in each year of age was produced by applying the index numbers for the calendar year corresponding to the child's age to the values for that age in table 1, and, as in table 2, summing the results to obtain total annual costs.

Index numbers comparable to those in table 4 can be produced for other years. It must be recognized, however, that the effects of rising real incomes, the new goods and services coming on the market, and changing consumer preferences on the mix of food and other goods and services being consumed cannot be built into our updating. Therefore as the span between the base period, 1960-61, and the year for which adjustment is made lengthens either forward or backward in time, adjustment for price change alone becomes increasingly insufficient as a correction to true current costs.

The component indexes of the CPI that have been used to adjust for price changes in the various categories are:

<u>Category</u>	<u>Index</u>
Food at home	Food at home
Food away from home	Food away from home <u>10/</u>
Clothing	Apparel and upkeep
Housing	Housing
Medical care	Medical care
Education	Reading and recreation
Transportation	Transportation
All other	Personal care, reading and recreation averaged

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10/ The index for food away from home was begun in 1953. Index numbers for 1952 and 1951 were computed using the average percentage annual change in the years 1953-56.



Table 1A.--Estimated cost of raising a farm child at level of low-cost food plan, by region, in 1961 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--										Average age family size (Persons)
	Total	Food		Away from home	Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	
		Total	At home 1/								
North Central											
Under 1	\$756	\$133	\$133	\$0	\$13	\$292	\$46	\$0	\$153	\$90	5.3
1	786	162	162	0	43	292	46	0	153	90	5.3
2	749	158	158	0	74	256	43	0	133	84	5.3
3	749	158	158	0	74	256	43	0	133	84	5.8
4	792	201	182	19	74	256	43	0	133	84	5.8
5	792	201	182	19	74	256	43	0	133	84	5.8
6	819	200	180	19	105	234	42	14	131	93	6.0
7	857	238	218	19	105	234	42	14	131	93	6.0
8	857	238	218	19	105	234	42	14	131	93	6.0
9	857	238	218	19	105	234	42	14	131	93	6.0
10	895	276	256	19	105	234	42	14	131	93	6.0
11	895	276	256	19	105	234	42	14	131	93	6.0
12	986	282	259	23	155	240	42	14	152	102	5.7
13	1,013	308	285	23	155	240	42	14	152	102	5.7
14	1,013	308	285	23	155	240	42	14	152	102	5.7
15	1,013	308	285	23	155	240	42	14	152	102	5.7
16	1,089	344	320	24	180	243	42	14	159	106	5.5
17	1,089	344	320	24	180	243	42	14	159	106	5.5
Total	\$16,007	\$4,373	\$4,075	\$292	\$1,992	\$4,458	\$768	\$168	\$2,550	\$1,694	
South											
Under 1	\$854	\$143	\$143	\$0	\$50	\$313	\$45	\$0	\$200	\$104	5.2
1	883	172	172	0	50	313	45	0	200	104	5.2
2	856	169	169	0	83	286	43	0	179	97	5.7
3	856	169	169	0	83	286	43	0	179	97	5.7
4	901	214	191	23	83	286	43	0	179	97	5.7
5	901	214	191	23	83	286	43	0	179	97	5.7
6	925	213	189	23	113	257	42	19	176	106	5.9
7	959	246	223	23	113	257	42	19	176	106	5.9
8	959	246	223	23	113	257	42	19	176	106	5.9
9	959	246	223	23	113	257	42	19	176	106	5.9
10	1,002	289	266	23	113	257	42	19	176	106	5.9
11	1,002	289	266	23	113	257	42	19	176	106	5.9
12	1,071	293	267	25	154	263	42	19	189	112	5.6
13	1,098	319	294	25	154	263	42	19	189	112	5.6
14	1,098	319	294	25	154	263	42	19	189	112	5.6
15	1,098	319	294	25	154	263	42	19	189	112	5.6
16	1,202	358	330	28	198	266	41	19	202	118	5.5
17	1,202	358	330	28	198	266	41	19	202	118	5.5
Total	\$17,826	\$4,576	\$4,234	\$340	\$2,122	\$4,696	\$764	\$228	\$3,332	\$1,916	





Table 1A.--Continued

Age of child (years)	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)	
		Total	At home 1/								
											Away from home
Northeast											
Under 1 ----	\$765	\$159	\$159	\$40	\$297	\$42	\$0	\$153	\$75	5.1	
1 -----	800	193	193	40	297	42	0	153	75	5.1	
2 -----	753	186	186	67	252	41	0	134	74	5.9	
3 -----	753	186	186	67	252	41	0	134	74	5.9	
4 -----	800	233	215	67	252	41	0	134	74	5.9	
5 -----	800	233	215	67	252	41	0	134	74	5.9	
6 -----	842	232	212	95	238	40	11	139	86	6.2	
7 -----	879	270	250	95	238	40	11	139	86	6.2	
8 -----	879	270	250	95	238	40	11	139	86	6.2	
9 -----	879	270	250	95	238	40	11	139	86	6.2	
10 -----	927	317	298	95	238	40	11	139	86	6.2	
11 -----	927	317	298	95	238	40	11	139	86	6.2	
12 -----	991	325	305	139	246	41	2	145	86	5.5	
13 -----	1,020	354	334	139	246	41	9	145	86	5.5	
14 -----	1,020	354	334	139	246	41	9	145	86	5.5	
15 -----	1,000	354	324	139	246	41	9	145	86	5.5	
16 -----	1,102	400	376	148	250	40	8	163	94	5.4	
17 -----	1,102	400	376	148	250	40	8	163	94	5.4	
Total ----	\$16,259	\$5,053	\$4,771	\$1,770	\$4,514	\$732	\$118	\$2,582	\$1,494		

Note: Detail may not add to total because of rounding.

1/ Includes home-produced. 2/ Includes shelter; fuel, light, refrigeration, and water; household operations; and furnishings and equipment. 3/ Includes personal care, recreation, reading, and other miscellaneous expenditures.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



Table 1B.--Estimated cost of raising a rural nonfarm child at level of low-cost food plan, by region, in 1961 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--									Average age family size (Persons)
	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	
		Total	At home 1/							
North Central										
Under 1 ----	\$802	\$140	\$140	\$43	\$318	\$39	\$0	\$178	\$84	4.9
1 -----	831	170	170	43	318	39	0	178	84	4.9
2 -----	744	163	163	62	259	36	0	147	77	5.8
3 -----	744	163	163	62	259	36	0	147	77	5.8
4 -----	785	204	189	62	259	36	15	147	77	5.8
5 -----	785	204	189	62	259	36	15	147	77	5.8
6 -----	814	204	189	97	242	36	15	147	77	5.8
7 -----	852	242	227	97	242	36	15	142	84	5.9
8 -----	852	242	227	97	242	36	15	142	84	5.9
9 -----	852	242	227	97	242	36	15	142	84	5.9
10 -----	890	280	265	97	242	36	15	142	84	5.9
11 -----	890	280	265	97	242	36	15	142	84	5.9
12 -----	964	284	267	138	245	36	18	160	92	5.6
13 -----	992	312	294	138	245	36	18	160	92	5.6
14 -----	992	312	294	138	245	36	18	160	92	5.6
15 -----	992	312	294	138	245	36	18	160	92	5.6
16 -----	1,061	351	332	171	247	35	20	171	97	5.5
17 -----	1,081	351	332	171	247	35	20	171	97	5.5
Total ----	\$15,943	\$4,456	\$4,227	\$1,810	\$4,598	\$652	\$232	\$2,776	\$1,542	
South										
Under 1 ----	\$901	\$146	\$146	\$52	\$341	\$42	\$0	\$216	\$104	4.8
1 -----	932	176	176	52	341	42	0	216	104	4.8
2 -----	836	169	169	75	282	39	0	177	93	5.6
3 -----	836	169	169	75	282	39	0	177	93	5.6
4 -----	879	212	193	75	282	39	19	177	93	5.6
5 -----	879	212	193	75	282	39	19	177	93	5.6
6 -----	884	210	191	102	256	38	19	167	100	5.9
7 -----	922	248	229	102	256	38	19	167	100	5.9
8 -----	922	248	229	102	256	38	19	167	100	5.9
9 -----	922	248	229	102	256	38	19	167	100	5.9
10 -----	960	287	267	102	256	38	19	167	100	5.9
11 -----	960	287	267	102	256	38	19	167	100	5.9
12 -----	1,027	290	268	141	259	37	22	182	107	5.8
13 -----	1,053	316	294	141	259	37	22	182	107	5.8
14 -----	1,053	316	294	141	259	37	22	182	107	5.8
15 -----	1,053	316	294	141	259	37	22	182	107	5.8
16 -----	1,167	355	331	190	265	37	24	196	114	5.6
17 -----	1,167	355	331	190	265	37	24	196	114	5.6
Total ----	\$17,353	\$4,560	\$4,270	\$1,960	\$4,912	\$690	\$288	\$3,262	\$1,836	



Table 1B.--Continued

Age of child (years)	Total	Food		Away from home	Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)
		Total	At home 1/								
Northeast											
Under 1 ----	\$908	\$157	\$157	\$0	\$47	\$354	\$41	\$0	\$197	\$111	5.3
1 -----	942	192	192	0	47	354	41	0	197	111	5.3
2 -----	897	187	187	0	70	315	39	0	177	107	5.6
3 -----	897	187	187	0	70	315	39	0	177	107	5.8
4 -----	940	230	211	19	70	315	39	0	177	107	5.8
5 -----	940	230	211	19	70	315	39	0	177	107	5.8
6 -----	979	229	209	20	102	302	39	15	174	117	5.9
7 -----	1,022	272	252	20	102	302	39	15	174	117	5.9
8 -----	1,022	272	252	20	102	302	39	15	174	117	5.9
9 -----	1,022	272	252	20	102	302	39	15	174	117	5.9
10 -----	1,069	320	300	20	102	302	39	15	174	117	5.9
11 -----	1,069	320	300	20	102	302	39	15	174	117	5.9
12 -----	1,143	324	302	22	156	309	39	15	184	121	5.7
13 -----	1,177	353	331	22	156	309	39	15	184	121	5.7
14 -----	1,177	353	331	22	156	309	39	15	184	121	5.7
15 -----	1,177	353	331	22	156	309	39	15	184	121	5.7
16 -----	1,293	397	372	25	195	315	39	14	203	130	5.4
17 -----	1,293	397	372	25	195	315	39	14	203	130	5.4
Total -----	\$18,972	\$5,045	\$4,749	\$296	\$2,000	\$5,646	\$706	\$178	\$3,288	\$2,096	
West											
Under 1 ----	\$1,029	\$154	\$154	\$0	\$48	\$373	\$50	\$0	\$256	\$147	5.0
1 -----	1,064	189	189	0	48	373	50	0	256	147	5.0
2 -----	969	183	183	0	77	317	47	0	214	131	5.7
3 -----	969	183	183	0	77	317	47	0	214	131	5.7
4 -----	1,018	232	211	21	77	317	47	0	214	131	5.7
5 -----	1,018	232	211	21	77	317	47	0	214	131	5.7
6 -----	1,047	230	208	21	113	295	47	15	208	141	6.0
7 -----	1,090	272	251	21	113	295	47	15	208	141	6.0
8 -----	1,090	272	251	21	113	295	47	15	208	141	6.0
9 -----	1,090	272	251	21	113	295	47	15	208	141	6.0
10 -----	1,133	315	294	21	113	295	47	15	208	141	6.0
11 -----	1,133	315	294	21	113	295	47	15	208	141	6.0
12 -----	1,232	320	295	24	173	302	47	14	227	150	5.7
13 -----	1,261	349	324	24	173	302	47	14	227	150	5.7
14 -----	1,261	349	324	24	173	302	47	14	227	150	5.7
15 -----	1,261	349	324	24	173	302	47	14	227	150	5.7
16 -----	1,376	402	374	28	177	317	48	12	256	164	5.3
17 -----	1,376	402	374	28	177	317	48	12	256	164	5.3
Total -----	\$20,417	\$5,020	\$4,695	\$320	\$2,128	\$5,626	\$854	\$170	\$4,036	\$2,592	

Note: Detail may not add to total because of rounding.

1/ Includes home-produced.

2/ Includes shelter; fuel, light, refrigeration, and water; household operations; and furnishings and equipment.

3/ Includes personal care, recreation, reading, and other miscellaneous expenditures.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



Table 1C.--Estimated cost of raising an urban child at level of low-cost food plan, by region, in 1961 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--										Average age family size (Persons)
	Total	Food		Away from home	Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	
		Total	At home 1/								
North Central											
Under 1 ----	\$919	\$155	\$155	\$0	\$50	\$373	\$44	\$0	\$190	\$107	4.8
1 ----	955	190	190	0	50	373	44	0	190	107	4.8
2 ----	885	184	184	0	73	321	42	0	165	100	5.5
3 ----	885	184	184	0	73	321	42	0	165	100	5.5
4 ----	929	228	209	19	73	321	42	0	165	100	5.5
5 ----	929	228	209	19	73	321	42	0	165	100	5.5
6 ----	915	225	206	19	105	291	41	14	157	108	5.6
7 ----	985	268	249	19	105	291	41	14	157	108	5.8
8 ----	985	268	249	19	105	291	41	14	157	108	5.8
9 ----	985	268	249	19	105	291	41	14	157	108	5.8
10 ----	1,028	311	292	19	105	291	41	14	157	108	5.8
11 ----	1,028	311	292	19	105	291	41	14	157	108	5.8
12 ----	1,098	315	294	21	148	297	41	13	169	115	5.6
13 ----	1,127	344	323	21	148	297	41	13	169	115	5.6
14 ----	1,127	344	323	21	148	297	41	13	169	115	5.6
15 ----	1,127	344	323	21	148	297	41	13	169	115	5.6
16 ----	1,264	389	366	24	205	306	41	12	187	123	5.3
17 ----	1,264	389	366	24	205	306	41	12	187	123	5.3
Total ----	\$18,435	\$4,945	\$4,663	\$284	\$2,024	\$5,576	\$748	\$160	\$3,032	\$1,968	
South											
Under 1 ----	\$889	\$151	\$151	\$0	\$52	\$357	\$44	\$0	\$178	\$107	4.8
1 ----	919	181	181	0	52	357	44	0	178	107	4.8
2 ----	843	175	175	0	76	301	42	0	151	98	5.5
3 ----	843	175	175	0	76	301	42	0	151	98	5.5
4 ----	880	213	196	16	76	301	42	0	151	98	5.5
5 ----	880	213	196	16	76	301	42	0	151	98	5.5
6 ----	888	211	194	16	106	268	40	15	143	105	5.6
7 ----	926	249	233	16	106	268	40	15	143	105	5.6
8 ----	926	249	233	15	106	268	40	15	143	105	5.6
9 ----	926	249	233	16	106	268	40	15	143	105	5.6
10 ----	965	288	272	16	106	268	40	15	143	105	5.6
11 ----	965	288	272	16	106	268	40	15	143	105	5.6
12 ----	1,035	291	272	19	147	272	40	14	158	113	5.5
13 ----	1,062	318	299	19	147	272	40	14	158	113	5.5
14 ----	1,062	318	299	19	147	272	40	14	158	113	5.5
15 ----	1,062	318	299	19	147	272	40	14	158	113	5.5
16 ----	1,151	361	341	20	167	279	40	14	170	119	5.2
17 ----	1,151	361	341	20	167	279	40	14	170	119	5.2
Total ----	\$17,373	\$4,609	\$4,362	\$244	\$1,966	\$5,172	\$736	\$174	\$2,790	\$1,926	





Table 1C.--Continued

Age of child (years)	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)	
		Total	At home 1/								
											Away from home
Northeast											
Under 1 ----	\$754	\$166	\$166	\$44	\$317	\$37	\$0	\$122	\$68	4.8	
1 ----	789	201	201	44	317	37	0	122	68	4.8	
2 ----	756	194	194	72	274	36	0	110	70	5.5	
3 ----	756	194	194	72	274	36	0	110	70	5.5	
4 ----	796	234	222	72	274	36	0	110	70	5.5	
5 ----	796	234	222	72	274	36	0	110	70	5.5	
6 ----	814	232	218	100	252	36	7	110	70	5.5	
7 ----	857	275	262	100	252	36	7	106	81	5.8	
8 ----	857	275	262	100	252	36	7	106	81	5.8	
9 ----	905	275	262	100	252	36	7	106	81	5.8	
10 ----	905	323	309	100	252	36	7	106	81	5.8	
11 ----	905	323	309	100	252	36	7	106	81	5.8	
12 ----	967	328	313	132	257	36	6	121	87	5.5	
13 ----	995	356	341	132	257	36	6	121	87	5.5	
14 ----	995	356	341	132	257	36	6	121	87	5.5	
15 ----	995	356	341	132	257	36	6	121	87	5.5	
16 ----	1,071	404	386	147	259	35	6	129	91	5.3	
17 ----	1,071	404	386	147	259	35	6	129	91	5.3	
Total ----	\$15,936	\$5,130	\$4,929	\$1,798	\$4,788	\$648	\$78	\$2,062	\$1,432		
West											
Under 1 ----	\$932	\$160	\$160	\$48	\$367	\$54	\$0	\$191	\$113	4.9	
1 ----	967	195	195	48	367	54	0	191	113	4.9	
2 ----	906	189	189	72	319	51	0	167	107	5.6	
3 ----	906	189	189	72	319	51	0	167	107	5.6	
4 ----	956	239	216	72	319	51	0	167	107	5.6	
5 ----	956	239	216	72	319	51	0	167	107	5.6	
6 ----	990	281	213	106	299	51	11	165	120	5.8	
7 ----	1,033	281	257	106	299	51	11	165	120	5.8	
8 ----	1,033	281	257	106	299	51	11	165	120	5.8	
9 ----	1,033	281	257	106	299	51	11	165	120	5.8	
10 ----	1,081	329	304	106	299	51	11	165	120	5.8	
11 ----	1,081	329	304	106	299	51	11	165	120	5.8	
12 ----	1,149	333	306	144	306	51	10	179	126	5.6	
13 ----	1,178	362	335	144	306	51	10	179	126	5.6	
14 ----	1,178	362	335	144	306	51	10	179	126	5.6	
15 ----	1,178	362	335	144	306	51	10	179	126	5.6	
16 ----	1,270	412	382	147	313	50	9	201	138	5.4	
17 ----	1,270	412	382	147	313	50	9	201	138	5.4	
Total ----	\$19,097	\$5,193	\$4,832	\$1,890	\$5,654	\$922	\$124	\$3,158	\$2,154		

Note: Detail may not add to total because of rounding.

1/ Includes home-produced, and equipment.

2/ Includes shelter; fuel, light, refrigeration, and water; household operations; and furnishings.

3/ Includes personal care, recreation, reading, and other miscellaneous expenditures.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



Table 2A.--Estimated cost of raising a farm child at level of low-cost food plan, by region, at 1959 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--								Aver- age family size (Persons)	
	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion		All other 3/
		Total	At home 1/							
North Central										
Under 1 ----	\$920	\$160	\$160	\$50	\$360	\$60	\$0	\$180	\$110	5.3
1 -----	950	190	190	50	360	60	0	180	110	5.3
2 -----	910	190	190	90	310	60	0	160	100	5.8
3 -----	910	190	190	90	310	60	0	160	100	5.8
4 -----	960	240	220	90	310	60	0	160	100	5.8
5 -----	960	240	220	90	310	60	0	160	100	5.8
6 -----	1,000	240	220	130	280	60	20	160	110	6.0
7 -----	1,040	280	260	130	280	60	20	160	110	6.0
8 -----	1,040	280	260	130	280	60	20	160	110	6.0
9 -----	1,040	280	260	130	280	60	20	160	110	6.0
10 -----	1,090	330	310	130	280	60	20	160	110	6.0
11 -----	1,090	330	310	130	280	60	20	160	110	6.0
12 -----	1,200	340	310	190	290	60	20	180	120	5.7
13 -----	1,230	370	340	190	290	60	20	180	120	5.7
14 -----	1,230	370	340	190	290	60	20	180	120	5.7
15 -----	1,230	370	340	190	290	60	20	180	120	5.5
16 -----	1,330	410	380	220	300	60	20	190	130	5.5
17 -----	1,330	410	380	220	300	60	20	190	130	5.5
Total -----	\$19,460	\$5,220	\$4,820	\$2,440	\$5,400	\$1,080	\$240	\$3,060	\$2,020	
South										
Under 1 ----	\$1,040	\$170	\$170	\$60	\$380	\$60	\$0	\$240	\$130	5.2
1 -----	1,060	210	210	60	380	60	0	240	130	5.2
2 -----	1,040	200	200	100	350	60	0	210	120	5.7
3 -----	1,040	200	200	100	350	60	0	210	120	5.7
4 -----	1,100	260	230	100	350	60	0	210	120	5.7
5 -----	1,100	260	230	100	350	60	0	210	120	5.7
6 -----	1,130	260	230	140	310	60	20	210	130	5.9
7 -----	1,170	300	270	140	310	60	20	210	130	5.9
8 -----	1,170	300	270	140	310	60	20	210	130	5.9
9 -----	1,170	300	270	140	310	60	20	210	130	5.9
10 -----	1,220	350	320	140	310	60	20	210	130	5.9
11 -----	1,220	350	320	140	310	60	20	210	130	5.9
12 -----	1,300	350	320	190	320	60	20	220	140	5.6
13 -----	1,330	380	350	190	320	60	20	220	140	5.6
14 -----	1,330	380	350	190	320	60	20	220	140	5.6
15 -----	1,330	380	350	190	320	60	20	220	140	5.6
16 -----	1,450	440	400	240	320	60	20	240	140	5.5
17 -----	1,450	440	400	240	320	60	20	240	140	5.5
Total -----	\$21,690	\$5,530	\$5,090	\$2,600	\$5,940	\$1,080	\$240	\$3,940	\$2,360	



Table 2A.--Continued

Age of child (years)	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)	
		Total	At home 1/								Away from home
Northeast											
Under 1 ----	\$930	\$190	\$190	\$50	\$360	\$60	\$0	\$180	\$90	5.1	
1 -----	970	230	230	50	360	60	0	180	90	5.1	
2 -----	920	220	220	80	310	60	0	160	90	5.9	
3 -----	920	220	220	80	310	60	0	160	90	5.9	
4 -----	980	280	260	80	310	60	0	160	90	5.9	
5 -----	930	280	260	80	310	60	0	160	90	5.9	
6 -----	1,020	280	250	120	290	60	10	160	100	6.2	
7 -----	1,070	330	300	120	290	60	10	160	100	6.2	
8 -----	1,070	330	300	120	290	60	10	160	100	6.2	
9 -----	1,130	390	360	120	290	60	10	160	100	6.2	
10 -----	1,130	390	360	120	290	60	10	160	100	6.2	
11 -----	1,200	390	360	120	290	60	10	160	100	6.2	
12 -----	1,240	430	400	170	300	60	10	170	100	5.5	
13 -----	1,240	430	400	170	300	60	10	170	100	5.5	
14 -----	1,240	430	400	170	300	60	10	170	100	5.5	
15 -----	1,330	480	450	180	300	60	10	190	110	5.4	
16 -----	1,330	480	450	180	300	60	10	190	110	5.4	
17 -----											
Total ----	\$19,770	\$6,110	\$5,710	\$2,180	\$5,500	\$1,080	\$120	\$3,020	\$1,760		

Note: Data have been rounded to the nearest \$10.

1/ Includes home-produced. 2/ Includes shelter; fuel, light, refrigeration, and water; household operations; and furnishings and equipment. 3/ Includes personal care, recreation, reading, and other miscellaneous expenditures.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



Table 2B.--Estimated cost of raising a rural nonfarm child at level of low-cost food plan, by region, at 1969 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--								Average age family size (persons)	
	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion		All other 3/
		Total	At home 1/							
North Central										
Under 1 ----	\$970	\$170	\$170	\$50	\$390	\$50	\$0	\$210	\$100	4.9
1 -----	1,000	200	200	50	390	50	0	210	100	4.9
2 -----	910	200	200	80	320	50	0	170	90	5.8
3 -----	910	200	200	80	320	50	0	170	90	5.8
4 -----	960	250	230	80	320	50	0	170	90	5.8
5 -----	960	250	230	80	320	50	0	170	90	5.8
6 -----	990	250	230	120	290	50	10	170	100	5.8
7 -----	1,030	290	270	120	290	50	10	170	100	5.9
8 -----	1,030	290	270	120	290	50	10	170	100	5.9
9 -----	1,030	290	270	120	290	50	10	170	100	5.9
10 -----	1,080	340	320	120	290	50	10	170	100	5.9
11 -----	1,080	340	320	120	290	50	10	170	100	5.9
12 -----	1,170	340	320	170	300	50	10	190	110	5.6
13 -----	1,200	370	350	170	300	50	10	190	110	5.6
14 -----	1,200	370	350	170	300	50	10	190	110	5.6
15 -----	1,200	370	350	210	300	50	10	200	120	5.5
16 -----	1,320	430	400	210	300	50	10	200	120	5.5
17 -----	1,320	430	400	210	300	50	10	200	120	5.5
Total ----	\$19,360	\$5,380	\$5,080	\$2,240	\$5,600	\$900	\$120	\$3,280	\$1,840	
South										
Under 1 ----	\$1,100	\$170	\$170	\$60	\$420	\$60	\$0	\$260	\$130	4.8
1 -----	1,140	210	210	60	420	60	0	260	130	4.8
2 -----	1,000	200	200	90	340	50	0	210	110	5.6
3 -----	1,000	200	200	90	340	50	0	210	110	5.6
4 -----	1,060	260	230	90	340	50	0	210	110	5.6
5 -----	1,060	260	230	90	340	50	0	210	110	5.6
6 -----	1,080	260	230	130	310	50	10	200	120	5.9
7 -----	1,120	300	270	130	310	50	10	200	120	5.9
8 -----	1,120	300	270	130	310	50	10	200	120	5.9
9 -----	1,120	300	270	130	310	50	10	200	120	5.9
10 -----	1,170	350	320	130	310	50	10	200	120	5.9
11 -----	1,170	350	320	130	310	50	10	200	120	5.9
12 -----	1,250	350	320	170	320	50	10	220	130	5.8
13 -----	1,280	380	350	170	320	50	10	220	130	5.8
14 -----	1,280	380	350	170	320	50	10	220	130	5.8
15 -----	1,280	380	350	170	320	50	10	220	130	5.8
16 -----	1,410	430	400	230	320	50	10	230	140	5.6
17 -----	1,410	430	400	230	320	50	10	230	140	5.6
Total ----	\$21,050	\$5,510	\$5,090	\$2,400	\$5,980	\$920	\$120	\$3,900	\$2,220	





Table 2B.--Continued

Age of child (years)	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)	
		Total	At home 1/								
											Away from home
Northeast											
Under 1 ----	\$1,100	\$190	\$190	\$60	\$430	\$60	\$0	\$230	\$130	5.3	
1 -----	1,140	230	230	60	430	50	0	230	130	5.3	
2 -----	1,080	220	220	90	380	50	0	210	130	5.8	
3 -----	1,080	220	220	90	380	50	0	210	130	5.8	
4 -----	1,130	270	250	90	380	50	0	210	130	5.8	
5 -----	1,130	270	250	90	380	50	0	210	130	5.8	
6 -----	1,200	280	250	130	370	50	20	210	130	5.9	
7 -----	1,250	330	300	130	370	50	20	210	140	5.9	
8 -----	1,250	330	300	130	370	50	20	210	140	5.9	
9 -----	1,250	330	300	130	370	50	20	210	140	5.9	
10 -----	1,310	390	360	130	370	50	20	210	140	5.9	
11 -----	1,310	390	360	130	370	50	20	210	140	5.9	
12 -----	1,400	390	360	190	380	50	20	220	150	5.7	
13 -----	1,440	430	400	190	380	50	20	220	150	5.7	
14 -----	1,440	430	400	190	380	50	20	220	150	5.7	
15 -----	1,440	430	400	190	380	50	20	220	150	5.7	
16 -----	1,560	470	440	240	380	50	20	240	160	5.4	
17 -----	1,560	470	440	240	380	50	20	240	160	5.4	
Total ----	\$23,070	\$6,070	\$5,670	\$2,500	\$6,880	\$920	\$240	\$3,920	\$2,540		
West											
Under 1 ----	\$1,250	\$180	\$180	\$60	\$460	\$70	\$0	\$300	\$180	5.0	
1 -----	1,300	230	230	60	460	70	0	300	180	5.0	
2 -----	1,190	220	220	100	390	70	0	250	160	5.7	
3 -----	1,190	220	220	100	390	70	0	250	160	5.7	
4 -----	1,250	280	250	100	390	70	0	250	160	5.7	
5 -----	1,250	280	250	100	390	70	0	250	160	5.7	
6 -----	1,290	280	250	140	360	70	20	250	170	6.0	
7 -----	1,340	330	300	140	360	70	20	250	170	6.0	
8 -----	1,340	330	300	140	360	70	20	250	170	6.0	
9 -----	1,390	380	350	140	360	70	20	250	170	6.0	
10 -----	1,390	380	350	140	360	70	20	250	170	6.0	
11 -----	1,500	380	350	210	370	70	20	270	180	5.7	
12 -----	1,540	420	390	210	370	70	20	270	180	5.7	
13 -----	1,540	420	390	210	370	70	20	270	180	5.7	
14 -----	1,540	420	390	210	370	70	20	270	180	5.7	
15 -----	1,680	490	450	220	390	70	20	300	200	5.3	
16 -----	1,680	490	450	220	390	70	10	300	200	5.3	
17 -----	1,680	490	450	220	390	70	10	300	200	5.3	
Total ----	\$25,000	\$6,050	\$5,620	\$2,640	\$6,900	\$1,260	\$220	\$4,780	\$3,140		

Note: Data have been rounded to the nearest \$10.

1/ Includes household operations; and furnishings and equipment.

2/ Includes shelter; fuel, light, refrigeration, and water.

3/ Includes home-produced.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.

Includes personal care, recreation, reading, and other miscellaneous expenditures.



Table 2C.--Estimated cost of raising an urban child at level of low-cost food plan, by region, at 1969 prices  
[In family of husband and wife and no more than five children]

Age of child (years)	Estimated cost for--										Average family size (Persons)
	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/		
		Total	At home 1/							Away from home	
North Central											
Under 1	\$1,130	\$190	\$190	\$0	\$60	\$460	\$60	\$0	\$230	\$130	4.8
1	1,170	230	230	0	60	460	60	0	230	130	4.8
2	1,080	220	220	0	90	390	60	0	200	120	5.5
3	1,080	220	220	0	90	390	60	0	200	120	5.5
4	1,140	280	250	30	90	390	60	0	200	120	5.5
5	1,140	280	250	30	90	390	60	0	200	120	5.5
6	1,170	280	250	30	130	360	60	20	200	120	5.5
7	1,220	330	300	30	130	360	60	20	190	130	5.8
8	1,220	330	300	30	130	360	60	20	190	130	5.8
9	1,220	330	300	30	130	360	60	20	190	130	5.8
10	1,270	360	350	30	130	360	60	20	190	130	5.8
11	1,270	360	350	30	130	360	60	20	190	130	5.8
12	1,340	380	350	30	180	360	60	20	200	140	5.6
13	1,380	420	390	30	180	360	60	20	200	140	5.6
14	1,380	420	390	30	180	360	60	20	200	140	5.6
15	1,380	420	390	30	180	360	60	20	200	140	5.6
16	1,550	470	440	30	250	380	60	20	220	150	5.3
17	1,550	470	440	30	250	380	60	20	220	150	5.3
Total	\$22,690	\$6,030	\$5,610	\$420	\$2,430	\$6,840	\$1,080	\$240	\$3,640	\$2,380	
South											
Under 1	\$1,060	\$180	\$180	\$0	\$60	\$440	\$60	\$0	\$210	\$130	4.8
1	1,120	220	220	0	60	440	60	0	210	130	4.8
2	1,030	210	210	0	90	370	60	0	180	120	5.5
3	1,030	210	210	0	90	370	60	0	180	120	5.5
4	1,080	260	240	20	90	370	60	0	180	120	5.5
5	1,080	260	240	20	90	370	60	0	180	120	5.5
6	1,090	250	230	20	130	330	60	20	170	130	5.6
7	1,140	300	280	20	130	330	60	20	170	130	5.6
8	1,140	300	280	20	130	330	60	20	170	130	5.6
9	1,140	300	280	20	130	330	60	20	170	130	5.6
10	1,190	350	330	20	130	330	60	20	170	130	5.6
11	1,190	350	330	20	130	330	60	20	170	130	5.6
12	1,280	360	330	30	180	330	60	20	190	140	5.5
13	1,310	390	360	30	180	330	60	20	190	140	5.5
14	1,310	390	360	30	180	330	60	20	190	140	5.5
15	1,310	390	360	30	180	330	60	20	190	140	5.5
16	1,420	440	410	30	210	340	60	20	200	150	5.2
17	1,420	440	410	30	210	340	60	20	200	150	5.2
Total	\$21,360	\$5,600	\$5,260	\$340	\$2,400	\$6,340	\$1,080	\$240	\$3,320	\$2,380	



Table 2C.--Continued

Age of child (years)	Total	Food		Clothing	Housing 2/	Medical care	Educa- tion	Trans- porta- tion	All other 3/	Aver- age family size (Persons)	
		Total	At home 1/								Away from home
Northeast											
Under 1 ----	\$930	\$200		\$60	\$390	\$50	\$0	\$150	\$80	4.8	
1 -----	970	240		60	390	50	0	150	80	4.8	
2 -----	930	230		90	340	50	0	130	90	5.5	
3 -----	930	230		90	340	50	0	130	90	5.5	
4 -----	990	290	20	90	340	50	0	130	90	5.5	
5 -----	990	290	20	90	340	50	0	130	90	5.5	
6 -----	1,000	280	20	120	310	50	10	130	100	5.5	
7 -----	1,050	330	310	120	310	50	10	130	100	5.8	
8 -----	1,050	330	310	120	310	50	10	130	100	5.8	
9 -----	1,050	330	310	120	310	50	10	130	100	5.8	
10 -----	1,110	390	370	120	310	50	10	130	100	5.8	
11 -----	1,110	390	370	120	310	50	10	130	100	5.8	
12 -----	1,180	400	380	160	310	50	10	140	110	5.5	
13 -----	1,210	430	410	160	310	50	10	140	110	5.5	
14 -----	1,210	430	410	160	310	50	10	140	110	5.5	
15 -----	1,300	480	460	180	320	50	10	150	110	5.3	
16 -----	1,300	480	460	180	320	50	10	150	110	5.3	
17 -----	1,300	480	460	180	320	50	10	150	110	5.3	
Total ----	\$19,520	\$6,180	\$5,900	\$2,200	\$5,880	\$900	\$120	\$2,460	\$1,780		
West											
Under 1 ----	\$1,150	\$190		\$60	\$450	\$80	\$0	\$230	\$140	4.9	
1 -----	1,190	230		60	450	80	0	230	140	4.9	
2 -----	1,110	230		90	390	70	0	200	130	5.6	
3 -----	1,110	230		90	390	70	0	200	130	5.6	
4 -----	1,170	290	30	90	390	70	0	200	130	5.6	
5 -----	1,170	290	30	90	390	70	0	200	130	5.6	
6 -----	1,220	290	260	130	370	70	10	200	130	5.6	
7 -----	1,270	340	310	130	370	70	10	200	150	5.8	
8 -----	1,270	340	310	130	370	70	10	200	150	5.8	
9 -----	1,270	340	310	130	370	70	10	200	150	5.8	
10 -----	1,330	400	370	130	370	70	10	200	150	5.8	
11 -----	1,330	400	370	130	370	70	10	200	150	5.8	
12 -----	1,400	410	370	180	370	70	10	210	150	5.6	
13 -----	1,430	440	400	180	370	70	10	210	150	5.6	
14 -----	1,430	440	400	180	370	70	10	210	150	5.6	
15 -----	1,430	440	400	180	370	70	10	210	150	5.6	
16 -----	1,550	500	460	180	380	70	10	240	170	5.4	
17 -----	1,550	500	460	180	380	70	10	240	170	5.4	
Total ----	\$23,380	\$6,300	\$5,880	\$2,340	\$6,920	\$1,280	\$120	\$3,780	\$2,640		

Note: Data have been rounded to the nearest \$10.

1/ Includes household operations; and furnishings and equipment.

2/ Includes home-produced.

3/ Includes personal care, recreation, reading, and other

[ miscellaneous expenditures.]

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



Table 3.--Estimated costs of raising a child born January 1, 1951, at low-cost food plan level, by region and urbanization, in prices current in the year specified  
[In family of husband and wife and no more than five children]

Age of child (years)	Year	Rural farm				Rural nonfarm				Urban			
		North Central	South	North-east	West	North Central	South	North-east	West	North Central	South	North-east	West
Under 1	1951	\$650	\$730	\$660		\$680	\$770	\$780	\$870	\$790	\$760	\$550	\$800
1	1952	690	780	710		730	820	830	930	840	810	700	860
2	1953	670	760	680		670	750	800	860	800	760	680	810
3	1954	670	770	680		670	750	800	860	800	760	680	810
4	1955	710	800	720		700	780	840	910	830	790	720	860
5	1956	720	820	730		710	790	850	920	850	800	730	870
6	1957	770	870	790		760	830	920	980	890	840	770	930
7	1958	830	930	850		820	890	990	1,050	950	900	840	1,000
8	1959	840	940	860		830	900	1,000	1,060	970	910	840	1,020
9	1960	850	950	870		840	910	1,010	1,080	980	920	850	1,030
10	1961	890	1,000	930		890	960	1,070	1,130	1,030	970	910	1,060
11	1962	910	1,020	940		900	970	1,080	1,150	1,040	980	920	1,100
12	1963	1,010	1,100	1,010		990	1,050	1,180	1,260	1,130	1,070	1,000	1,180
13	1964	1,050	1,140	1,060		1,030	1,090	1,220	1,310	1,180	1,110	1,040	1,230
14	1965	1,070	1,160	1,080		1,050	1,110	1,240	1,330	1,190	1,120	1,060	1,250
15	1966	1,100	1,190	1,110		1,080	1,140	1,280	1,370	1,230	1,160	1,090	1,280
16	1967	1,210	1,340	1,230		1,200	1,300	1,440	1,530	1,410	1,280	1,200	1,420
17	1968	1,260	1,390	1,270		1,250	1,350	1,490	1,590	1,470	1,340	1,240	1,460
Total		\$15,900	\$17,690	\$16,180		\$15,800	\$17,160	\$18,820	\$20,190	\$18,390	\$17,280	\$15,920	\$19,010

Note: Data rounded to nearest \$10.

Source: Data in table 1 adjusted by index numbers in table 4.





Table 4.--Index numbers of price change from base period  
to specified year, by urbanization

Year	Food		Clothing	Housing	Medical care	Educa- tion	Trans- porta- tion	All other
	At home	Away from home						
	Rural farm and rural nonfarm (1961 = 100)							
1951 --	95.5	80.2	95.3	84.9	69.1	85.8	80.0	84.2
1952 --	97.1	81.5	94.4	86.5	72.9	86.2	85.3	84.8
1953 --	95.4	82.8	93.7	88.8	75.4	87.0	87.7	85.6
1954 --	94.9	84.3	93.5	89.9	77.8	86.2	86.5	85.4
1955 --	93.0	85.2	93.1	90.6	79.6	85.9	85.4	86.0
1956 --	93.4	86.8	95.0	91.9	82.5	87.1	87.0	88.3
1957 --	96.5	90.1	96.6	94.8	85.8	90.4	91.9	91.6
1958 --	100.7	92.8	96.9	96.4	89.9	94.0	95.0	95.0
1959 --	98.2	95.4	97.7	97.5	93.8	95.5	98.9	96.7
1960 --	99.1	97.9	99.2	99.2	97.1	97.9	98.9	98.7
1961 --	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962 --	100.7	102.7	100.6	100.9	102.6	102.2	102.1	102.0
1963 --	102.0	105.0	101.7	102.0	105.1	104.0	102.7	103.6
1964 --	103.2	106.9	102.6	103.2	107.3	106.4	104.1	105.4
1965 --	105.6	109.3	103.7	104.4	109.9	107.5	105.8	106.3
1966 --	110.9	114.3	106.4	106.9	114.7	109.2	107.3	108.3
1967 --	110.6	120.2	110.7	110.0	122.8	112.0	110.4	111.2
1968 --	114.2	126.4	116.6	114.6	130.3	117.3	113.9	116.1
1969 --	119.7	134.1	123.4	121.9	139.3	121.7	118.3	121.2
	Urban (1960-61 = 100)							
1951 --	95.9	81.1	95.7	85.2	70.1	86.8	80.5	84.7
1952 --	97.6	82.4	94.7	86.9	73.9	87.1	85.8	85.4
1953 --	95.8	83.7	94.1	89.2	76.5	88.0	88.2	86.2
1954 --	95.3	85.2	93.9	90.2	78.9	87.1	87.0	86.0
1955 --	93.4	86.1	93.5	90.9	80.8	86.8	85.9	86.5
1956 --	93.8	87.8	95.3	92.3	83.7	88.1	87.5	88.9
1957 --	96.9	91.0	97.0	95.2	87.1	91.4	92.4	92.2
1958 --	101.1	93.8	97.3	96.8	91.2	95.0	95.5	95.6
1959 --	98.7	96.4	98.1	97.9	95.2	96.6	99.4	97.3
1960 --	99.6	98.9	99.6	99.6	98.5	98.9	99.4	99.3
1961 --	100.4	101.1	100.4	100.4	101.5	101.1	100.6	100.7
1962 --	101.1	103.8	101.0	101.3	104.1	103.3	102.7	102.7
1963 --	102.4	106.1	102.1	102.4	106.7	105.1	103.3	104.3
1964 --	103.6	108.0	103.0	103.6	108.8	107.6	104.7	106.1
1965 --	106.1	110.5	104.1	104.8	111.5	108.6	106.4	107.0
1966 --	111.4	115.5	106.8	107.3	116.4	110.4	108.0	109.0
1967 --	111.1	121.5	111.1	110.4	124.6	113.2	111.0	112.0
1968 --	114.7	127.8	117.1	115.1	132.2	118.5	114.6	116.9
1969 --	120.2	135.6	123.9	122.4	141.3	123.1	119.0	122.0

Source: Derived from components of Consumer Price Index.



Table 5.--Cost-income relationship, by region and urbanization,  
in 1960-61 prices  
[In families of husband, wife, and no more than five children]

Urbanization	North Central	South	Northeast	West
Annual average cost, all ages of child				
Farm -----	\$890	\$990	\$900	NA
Rural nonfarm --	890	960	1,050	\$1,130
Urban -----	1,020	970	890	1,060
Annual average disposable family income, <sup>1/</sup> all ages of child				
Farm -----	\$6,130	\$5,870	\$6,280	NA
Rural nonfarm --	5,660	5,960	6,560	\$6,830
Urban -----	6,560	5,690	5,370	6,700
Cost as a percentage of income				
	(Pct.)	(Pct.)	(Pct.)	(Pct.)
Farm -----	15	17	14	NA
Rural nonfarm --	16	16	16	17
Urban -----	16	17	17	16

Note: Averages rounded to nearest \$10.

<sup>1/</sup> Average weighted by number of children.

Source: Derived from the 1960-61 Survey of Consumer Expenditures.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR LIVESTOCK AND MEATS

Talk by Donald Seaborg  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D. C., 1:30 P.M., Wednesday, February 18, 1970

Red meat production in 1970 is expected to rise slightly with increases in beef a little more than offsetting declines in output of pork, lamb and veal. In 1969, meat production held about steady--a small increase in beef output offset smaller production of other meats.

Livestock prices last year averaged considerably higher than in 1968. Prices received by farmers for beef cattle averaged about \$26.20 per 100 pounds in 1969, about 12 percent more than in 1968 and highest since 1951. Prices received for hogs averaged almost \$23 per 100 pounds, about 23 percent higher than in 1968 and almost the same as in 1966, which was highest in recent years.

Consumer spending for meat in 1969 rose faster than the rise in consumer incomes. This coupled with little change in meat output accounted for the higher livestock prices. With only a small increase in meat production and further rises in disposable income, livestock prices may be up again in 1970. But increases are expected to be smaller than in 1969.

CATTLE

On January 1 this year the total cattle inventory had increased to 412.1 million head, an increase of 2.4 million from a year earlier. Beef cattle, up from 85.3 million head to 91.1 million head, accounted for all of the increase in cattle numbers. This gain more than offset the continuing decline in dairy cattle numbers--from 21.6 million head to 21.2 million.

The expansion in the beef herd is expected to continue and again offset the decline in dairy cattle in 1970. Higher feeder cattle prices in 1970 likely will encourage producers to continue expanding the breeding herd. Also, with nearly a 2 percent larger cow herd, this year's calf crop will be larger.









Calf crop may decline about 15 percent in 1969, and likely will in 1970. Lower dairy cow numbers and rising demand for feed will tend to sharply reduce calf slaughter supplies.

Weaker calf prices in the first half of 1970 are expected to be above a year earlier, when they averaged \$48.77 per 100 pounds. Choice veal calves at South St. Paul were about \$43.50 per 100 pounds in January, about \$11.75 higher than a year earlier.

Predictions of another record output of beef this year rely heavily on further expansion in cattle feeding. The expansion in cattle feeding in recent years has far outstripped increases in the calf crop.

Over the years, the shift from nonfed to fed slaughter has upped beef production. In 1969, fed cattle accounted for more than 60 percent of total cattle slaughter. Some further increases in beef production due to increases in the proportion of fed cattle in the total slaughter can be expected.

Another source of additional beef has been the shift of dairy calves from slaughter for veal to feeding for slaughter as mature animals. In recent years, a large part of the beef calf crop has been fed, and a lesser, although large, part of the dairy calf crop now needed for herd replacement has been fed. There will probably be further diversion of calves from slaughter for veal to the feedlot.

At the rates of shift in recent years from nonfed to fed slaughter and from calf slaughter to the feedlot, these sources probably will continue to provide additional beef until about 1975. Thereafter, increases in beef output will depend mainly on increases in the size of the beef calf crop and improvements in production efficiency.

## HOGS

Pork production in 1969 was down about 1 percent from 1968 even though hog-corn price ratios in late 1968 and early 1969 suggested increases in output. Unusually severe winter weather last year in the Corn Belt, which hampered herd management and contributed to the failure of many sows to breed, and disease problems have been advanced to explain the unexpected downturn in the face of a favorable market situation for hogs. Possible efficiency improvement opportunities and the high cost of capital probably also had a bearing on the downturn.

Nevertheless, the December 1968-March 1969 pig crop was down 5 percent and the June-November 1969 crop was down 7 percent. This interrupted the recent expansion in production that had been going on since late 1965. With a small fall pig crop, pork production will continue considerably below a year earlier through the first half of 1970.

The upward in pork price commentary is recurring. Hog prices have indicated they would be high a record, were some factors in December 1969. Hog prices in relation to feed costs are similar to those of 1965. In addition, the over the other side of the coin, the high cost of capital and the high interest in livestock production. For example, the cost of a 100-day-old pig is

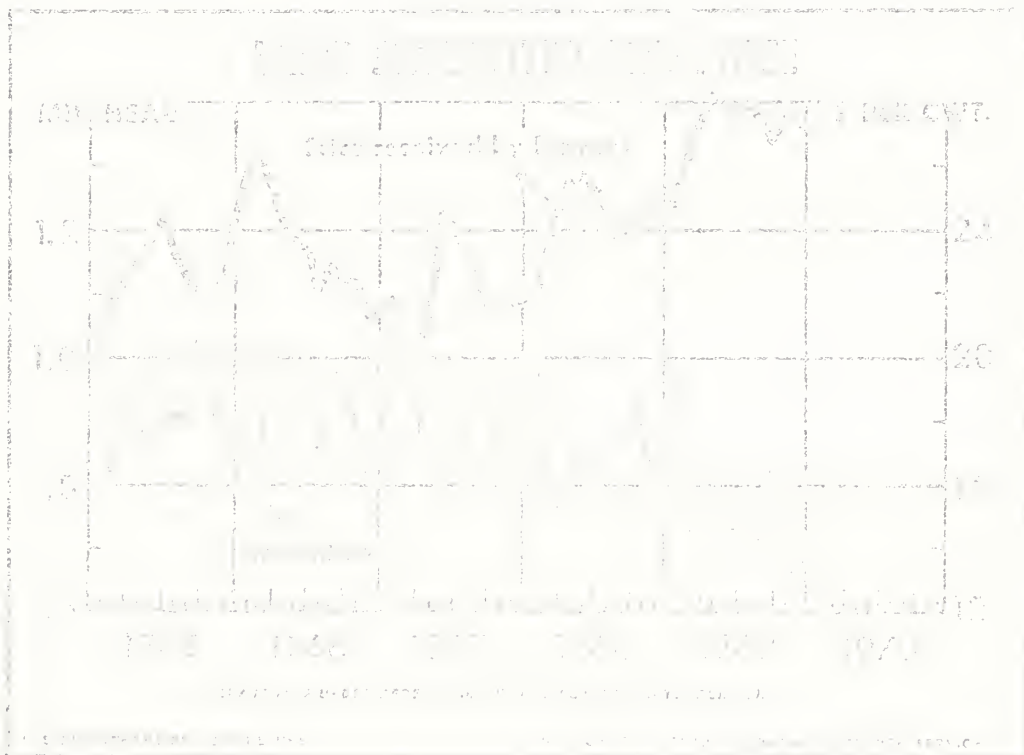
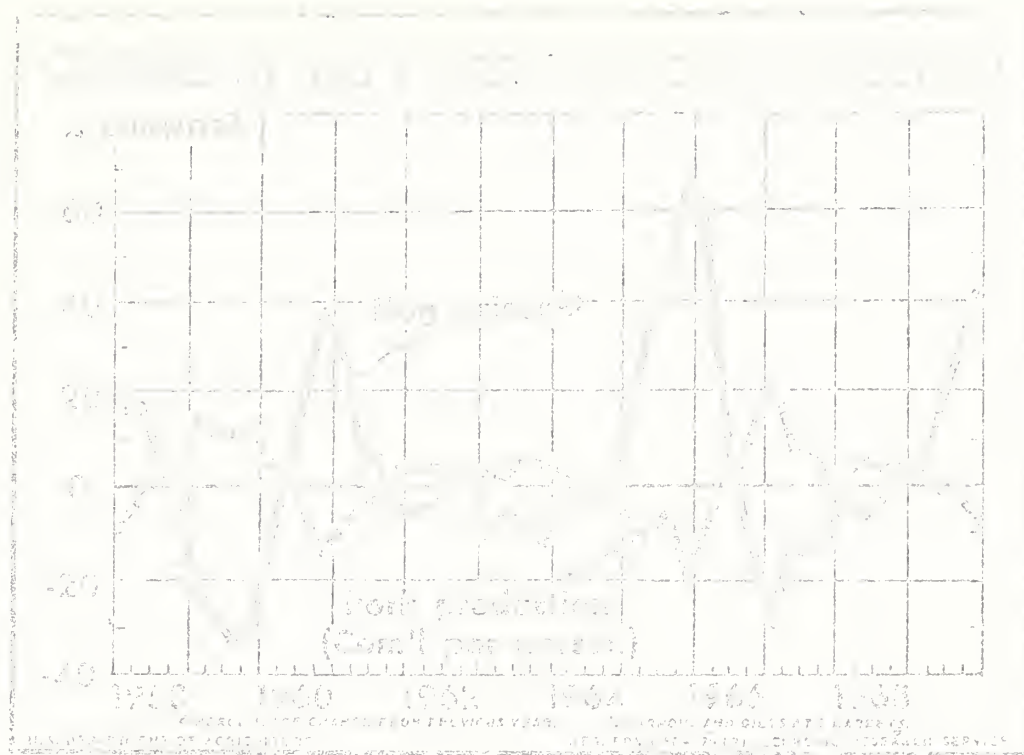
















# UNITED STATES DEPARTMENT OF AGRICULTURE

## Economic Research Service

### GENERAL AGRICULTURAL SITUATION AND OUTLOOK FOR 1970

Talk by Will M. Simmons\*

Acting Deputy Director, Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D. C., 2:00 P. M., Wednesday, February 18, 1970

Agriculture closed out the decade of the 1960's on a strong note, especially for livestock producers. Crop producers' income also edged up slightly as a larger volume of marketings more than offset slightly lower prices. Despite a \$2-1/4 billion increase in production costs, realized net income to farmers rose to \$16 billion, up \$1.2 billion from 1968.

Net farm income in 1970 may about match last year's. A larger volume of farm marketings and slightly higher average prices are expected to result in larger cash receipts. With Government payments holding close to the \$3.8 billion of 1969, gross farm income may increase about \$1-1/2 billion over the \$54-1/2 billion for last year. But production expenses continue to surge, and the increase this year likely will about offset the increase in gross income.

This appraisal for 1970 assumes a slower advance in economic activity, particularly in the first half of the year, and some easing of inflationary price pressures later in the year—as outlined earlier in the Conference.

Some of you may recall that a year ago at this Conference we said, "farm income this year (1969) may be hard pressed to match 1968 levels." That estimate of net realized farm income was conservative mainly because inflationary pressures were greater than anticipated, and red meat production did not increase as expected. The combination of these two factors resulted in exceptionally strong livestock prices through the year.

#### Demand for Farm Products

At the risk of some duplication, I would like to develop briefly some important demand

changes and prospects as a backdrop for discussing supply, use, and price prospects for farm products in 1970.

#### Domestic Demand

Signs of a slowing in economic activity have been fairly widespread in recent months, and slower growth in the Gross National Product and some easing in inflationary pressures are expected to dominate the next few months (figure 1). However, per capita after-tax income, buoyed by higher wage rates, tax reductions and increased social security payments, will continue to rise and will help maintain demand

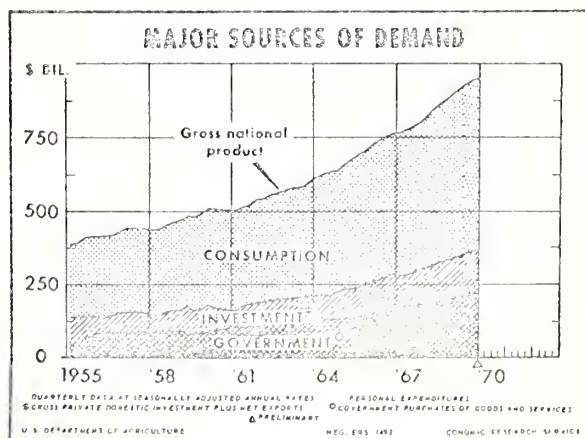


Figure 1

\*This paper draws on the work of the Economic and Statistical Analysis Division and other Divisions of the Economic Research Service, with assistance from the Foreign Agricultural Service and the Consumer and Marketing Service.



for food and for other nondurable goods as well as services (figure 2). Also, general price advances, particularly after mid-year, are expected to be slower than in 1969. This together with some expected increase in livestock production, will help to ease the upward pressure on retail food prices—but they will again show a substantial rise for the year.

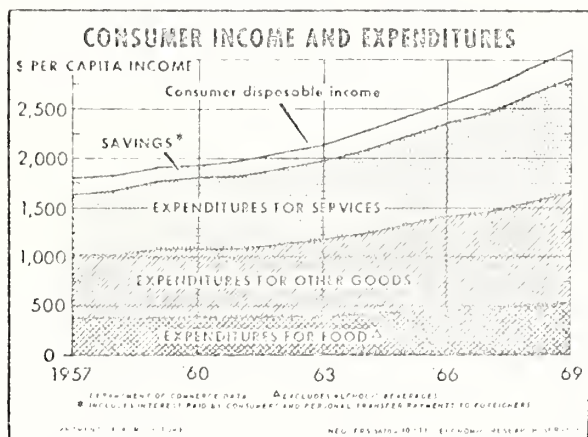


Figure 2

Prospects point to a moderate increase in food expenditures in 1970—perhaps about matching the 4-1/2 percent increase in 1969 when outlays totaled almost \$104 billion. The prospective increase in 1970 will reflect slightly larger sales and higher retail prices.

Retail food prices advanced sharply in 1969, averaging slightly more than 5 percent above the previous year (figure 3). Prices likely will rise another 3-1/2 to 4 percent this year. In 1969 about half of the increase in spending for U.S. farm foods went to processing and marketing agencies, for the marketing bill, and half to farmers. Farm prices for major

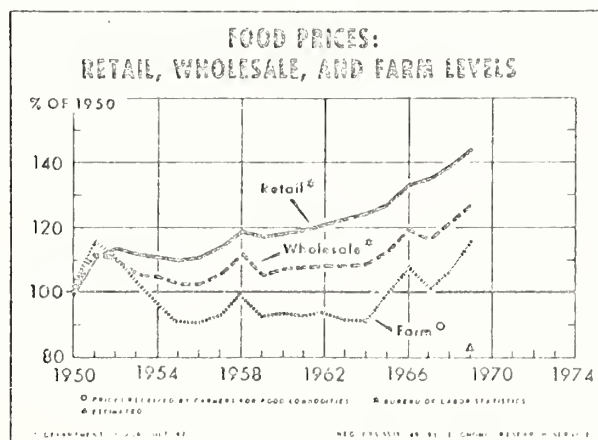


Figure 3

food products this year may average a little above a year ago, and the uptrend in costs of processing and marketing is expected to continue. But the marketing bill may increase more rapidly than last year, so that the farmer may get a smaller share of the increased food spending (figure 4).

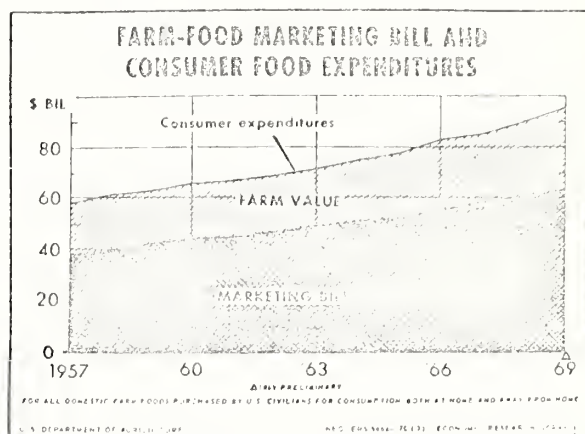


Figure 4

## Exports

Over time foreign markets have become increasingly important to U.S. farmers. But the upward trend for agricultural exports has been interrupted the past few years mainly because of large, well-distributed world grain crops, and declining dependence of foreign countries on U.S. cotton. The volume of U.S. agricultural exports changed little from 1967 to 1968 and declined about 9 percent in calendar year 1969. Most of the decline was due to cutbacks in exports of wheat, feed grains, and cotton. Exports in 1969 represented about 15 percent of the value of U.S. farm production; and for crops the figure was nearly a fifth. In the 1968/69 fiscal year exports accounted for more than half the 1968 production of rice, about two-fifths for soybeans—including meal and oil equivalent—more than a third for wheat, and a fourth for cotton.

Foreign demand for U.S. farm commodities improved late in 1969 and the current outlook for exports is a little brighter. Export gains are occurring for soybeans, wheat, vegetables, fruits, and most animal products. But shipments of dairy products and cotton continue to lag. Despite pressure from large foreign supplies, the value of farm exports for the 1969/70 marketing year may exceed \$6 billion compared with \$5.7 billion in 1968/69 (figure 5). Of course, as you know and have heard discussed in earlier sessions, many factors complicate the outlook for exports.



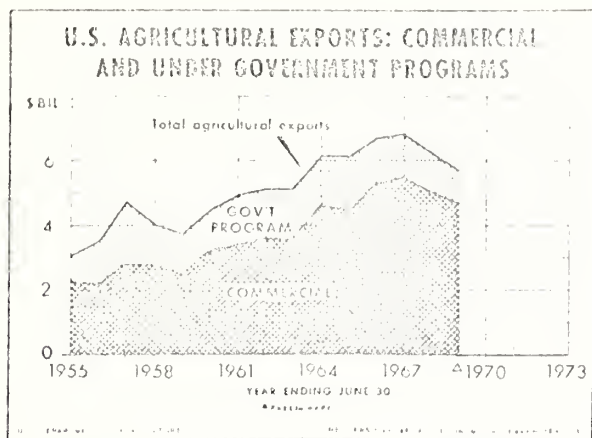


Figure 5

U.S. imports of agricultural products have risen over the years, and in 1969 were equivalent to more than a tenth of total domestic use. But about two-fifths of these imports were coffee, cocoa, tea, bananas, carpet wool, and other such products which do not compete directly with U.S. production.

#### Livestock Product Supplies and Prices

After a relatively profitable year in 1969, livestock producers are expected to expand output some this year. Demand will continue to expand, and prices to producers this year are expected to average a little above last year.

**Beef** production is expected to be up. Six percent more cattle on feed January 1 probably means larger fed cattle marketings into mid-year. With a somewhat larger feeder cattle supply compared with a year ago, it seems likely that fed cattle marketings in the second half will continue above 1969 levels. As in 1969, increased fed beef production will be partly offset by a reduction in slaughter of nonfed steers and heifers. Little change is likely in cow slaughter. Prices for fed cattle probably will strengthen into spring and summer, but less than the sharp jump last spring (figure 6).

**Pork** output will continue well under year-earlier levels through the first half of the year, but producers indicated plans to increase spring farrowings by 3 percent. This would provide larger slaughter supplies in the second half. Hog prices likely will strengthen seasonally into summer then decline in the fall (figure 7).

**Broiler meat** supplies for the first quarter likely will be more than a tenth above a year

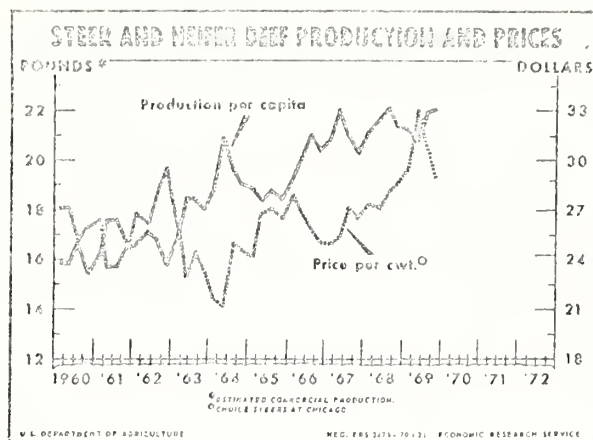


Figure 6

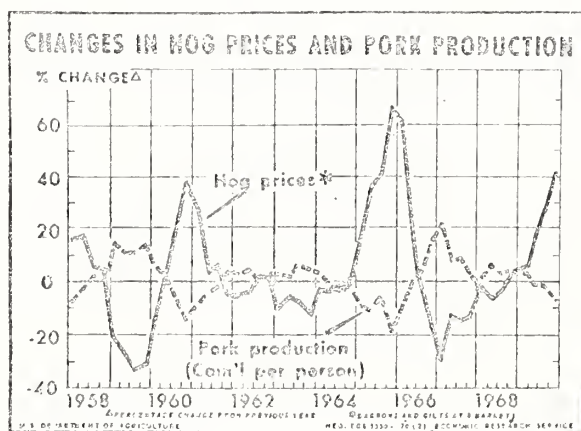


Figure 7

earlier. Output probably will continue substantially above year-earlier levels during the spring, and hold above in the second half of the year. **Turkey** producers in January stated intentions to raise 5 percent more turkeys this year.

**Milk** production in 1969 was 1 percent below a year earlier. Output in 1970 may show little change (figure 8). The slower decline in milk cow numbers coupled with rising output per cow interrupted the downtrend in the last half of 1969. In early 1970 cow numbers were down about 2 percent from a year ago, and output per cow was up 2 percent. Commercial disappearance of dairy products may rise slightly, and CCC removals of dairy products probably will be a little less than the 4.6 billion pounds, milk equivalent, in 1969. Prices to producers are expected to average moderately above last year.

**Egg** production is expected to be up in 1970. Output was a little larger than a year





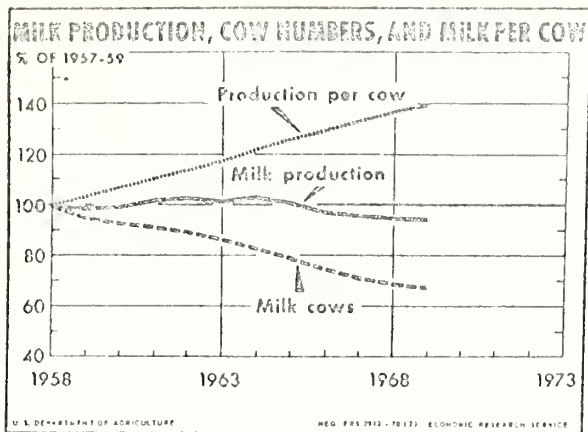


Figure 8

earlier during late 1969, but continued strong consumer demand and relatively high meat prices resulted in sharply higher prices for eggs. Prices have dropped considerably from late January levels, but continue above a year earlier. If production in the second half of the year is up moderately as now anticipated, egg prices are expected to average below those of a year earlier (figure 9).

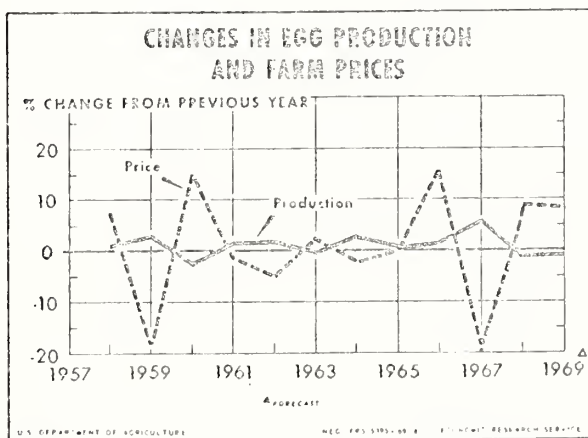


Figure 9

### Crop Supplies and Prices

Crop supplies in the 1969/70 marketing year are a little larger than in the previous season. Carryover at the beginning of the season was larger for a number of items and crop output was up about 1 percent. Expanding domestic markets, increasing exports of a number of crops, and support programs are expected to maintain prices for crops near those of last season.

It is too early to tell about prospects for 1970 crops. With wheat stocks continuing to build

up, the 1970 wheat acreage allotment was reduced 12 percent; and indicated production of winter wheat, which makes up about three-fourths of the total crop, is down a tenth. Acreage allotment for cotton was increased a million acres to bring production into better balance with requirements. The feed grain program carries most of the same basic provisions as in 1969, but lowers the acreage diversion payment rate.

Feed grain consumption is expanding in the 1969/70 season again promising a fairly close balance between supplies and requirements. Thus, the carryover at the end of the season may about equal the 50 million tons at the beginning (figure 10). Feed grain supplies were up this season largely because of a 5 million ton bigger crop in 1969. But liberal feeding of slightly more animals than last season is anticipated. While exports have been heavy so far this year, prospects are less promising this spring and summer. Strong domestic and export demand has boosted feed grain prices a little--prices in October-January averaged 5 percent above a year earlier. They probably will be nearer to last year's level this spring and summer, since a smaller seasonal rise is expected this year.

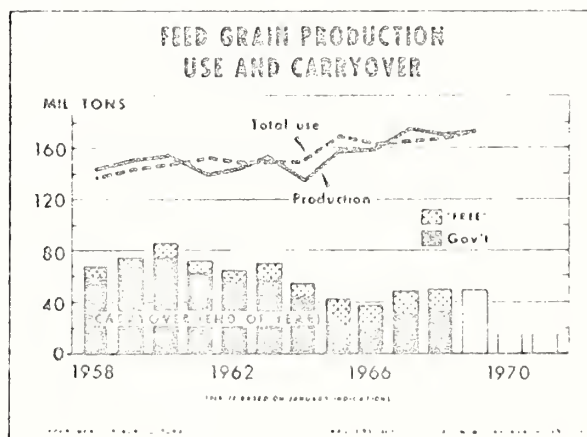


Figure 10

Wheat supplies for the 1969/70 marketing year were up some 160 million bushels from a year earlier. Total disappearance in July-December 1969, at 752 million bushels, was down slightly. But good export movement of hard spring wheat in recent months, heavy use of the loan program in the hard winter and white wheat areas, and large domestic use of soft red winter have improved the market situation for these wheats. Exports of all wheat in 1969/70 are expected to total some 10 percent above the 544 million bushels of last season. Even so, carryover in June may rise to 900 million bushels, 80 million more than a year earlier (figure 11).





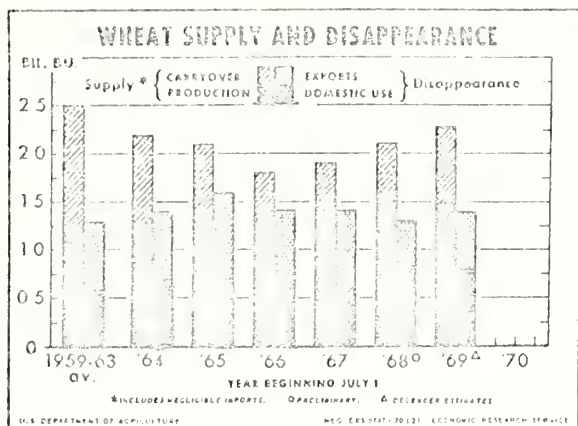


Figure 11

Soybean supplies are record large this season. But recent strong demand points to a 13 percent to 15 percent boost in total soybean usage this marketing year. Uncertainties in world supplies of competitive fish meal and oil and sunflowerseed oil could increase soybean utilization even more—perhaps enough to approximately balance the 1969 crop. Thus, carryover next September 1, at most, is likely to be only moderately above last September's 322 million bushels (figure 12). Prices to farmers for soybeans averaged \$2.28 per bushel in September-December, 10 cents less than the year before. Market prices moved up some in January but still remained below year-earlier levels. Next summer the trade may need to buy some soybeans from CCC as "free" supplies tighten.

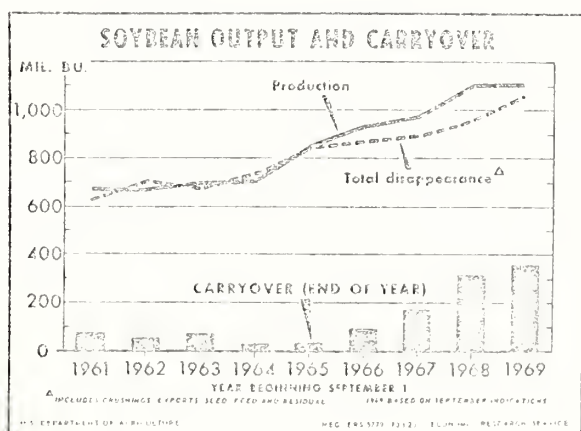


Figure 12

Cotton supplies are down this season. Although disappearance will be under last year's 11 million bales, it will still exceed the 1969 crop. Carryover next summer is estimated at the 6-million-bale level, half a million below

last August, and the smallest since the early 1950's (figure 13). Exports likely will not exceed 2-1/2 million bales this marketing year, down at least a quarter million from last year's low level. Domestic use may not quite equal last season's below average use. If the crop is larger in 1970, cotton utilization should show some recovery next season.

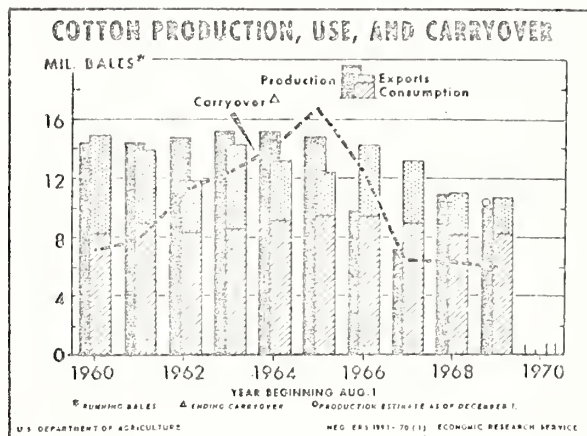


Figure 13

Tobacco supplies continue ample, though 3 percent below last season. The 1969 crop was up but carryover stocks were down. Domestic use likely will be close to that of last season; and with UN sanctions continuing against Rhodesian tobacco, U.S. exports may slightly exceed last year's 623 million pounds, farm-sales weight. Carryover stocks at the end of the season are expected to show a further decline.

Fruit supplies during the first half of 1970 are expected to total substantially above a year earlier. Yearend stocks of most processed fruits were up, and wholesale prices averaged lower. Cold storage holdings of major fresh deciduous fruits are sharply larger than a year ago, and February 1 conditions indicated that more citrus will be available.

Canned and frozen vegetable supplies remain large but moderately below last year's record volumes. Large carryover stocks of both canned and frozen vegetables partially offset sharply reduced packs. Prices for most processed items, while above the low levels of a year ago, are at very moderate levels and probably will remain so through the winter and spring.

Potato supplies are close to year-ago volume, but likely will be smaller in the spring. Storage stocks are down moderately in Central and Eastern States, but up substantially in the West. Prices have averaged below year-earlier levels in the West but are higher in the Central



and Eastern States. The winter crop, furnishing only a small part of market supplies, is expected to be down slightly. And early reports indicate a moderately smaller acreage for early spring harvest, and a substantial cut in acreage of the important late spring crop.

### Farm Income and Financial Situation

Farmers entered 1970 in a generally better income and financial condition than a year earlier. Realized net farm income was up substantially in 1969 (figure 14). Proprietors' equities in farm assets also increased, with almost two-thirds of the gain due to advances in value of farmland and buildings. But farmers in 1969 used a larger than usual portion of their earnings and reserves for operating expenses and capital outlays to reduce borrowings at high interest rates. Farm debt increased 6 percent.

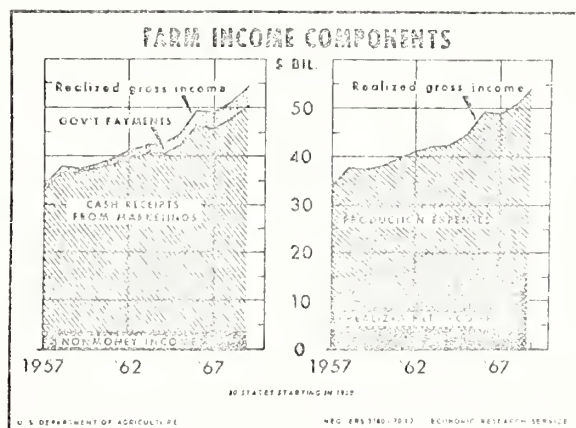


Figure 14

Realized gross farm income is expected to increase again in 1970. Another large crop in 1970 would result in some increase in crop marketings. Output of livestock products, which showed virtually no change in 1969, likely will be up a little in 1970. Prices to farmers may

average slightly above 1969 due to higher prices of livestock products. Thus, cash receipts are expected to be larger, and gross farm income may run around \$1-1/2 billion higher, to about \$56 billion.

But farm production expenses will continue their persistent advance in 1970, due mainly to rising prices of goods and services used in production. And farmers also are expected to purchase more feed and livestock. The increase in farm production expenses will likely be less than the sharp increase of 1969, but may offset the gain in gross farm income. Thus, realized net farm income this year may about match last year's \$16 billion.

With the continuing decline in number of farms, realized net income per farm likely will be a little above the record \$5,401 average for 1969. Also a slight gain is likely in the per capita income of the farm population as they continue to obtain more income from nonfarm sources. The average after tax income of farm people, from all sources, is expected to hold around 75 percent of the average per capita income for nonfarm people.

### IN SUMMARY:

--- We expect the pace of economic activity to be slower this year, with some easing of inflationary price pressures. But a growing population and further gains in disposable income will result in expansion in demand for farm products.

--- With more beef cattle and the upward trend in poultry and egg production, we expect increased marketings of livestock products. Also, assuming normal weather, crop output is likely to continue high.

--- Larger marketings and slightly higher prices will result in an increase in gross farm income in 1970. But production expenses will continue to rise, so that realized net income probably will be close to the 1969 level.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

FAMILY USE OF CREDIT

Talk by Katherine D. Smythe  
Consumer and Food Economics Research Division  
at the 47th Annual Agricultural Outlook Conference  
Washington, D.C., 2:15 P.M., Wednesday, February 18, 1970

Consumer credit is becoming an increasingly important factor in family finance as more families use it in larger amounts and in a greater number of forms. For some families credit is a useful tool; for others it becomes a burden and a source of worry. Which it will be is determined largely by the thought and planning that goes into its use and the family's understanding of the responsibilities it involves.

For some time the Consumer and Food Economics Research Division of ARS has needed information about how families make decisions on credit use, as background for developing aids to family financial management. In 1969 we undertook a cooperative study with the College of Home Economics of Oklahoma State University on family decision making in the use of consumer credit. Enid, Oklahoma, a city with a population of about 45,000 and the financial and farming center of northern Oklahoma, was selected as the survey area.

The survey included only husband-wife families in which the couple had been married 1 or more years and the husband was under 45 years old. This age group was used because previous studies have found that younger families are more likely to be using credit than older families. Local women trained by the research team visited a random sample of Enid families during September and October 1969 and interviewed those who met the stated requirements.

The major part of the schedule used in interviewing the families was made up of questions on decision-making in the use of credit, since this type of information was the main object of the survey. As background for asking questions and interpreting answers on decision-making, the schedule included some questions about credit transactions made, types of credit used, and amounts paid on consumer debts between July 1, 1968 and June 30, 1969, the survey year. (Debts for the purchase of a home were excluded from the survey.) This paper is a preliminary report of the findings on credit used by the families. The data on decision-making are being tabulated at Oklahoma State University under the direction of Dr. Florence McKinney, project leader there, and will be reported later.





## Preliminary Findings

The families.--The survey included 365 husband-wife families with a husband under 45 years of age. Of these, about 20 percent were under 25, and 40 percent each between 25 and 34 and 35 and 44 years. About three-fifths of the families had incomes (after taxes) between \$5,000 and \$10,000. The rest were fairly evenly divided between those with income below and above this range. Of every 10 families, 2 were headed by a college graduate and another 6 by a high school graduate. One-half of the wives worked at either full-time or part-time jobs, about twice as many working full-time as part-time. Families of 3 or 4 members accounted for about one-half of those surveyed and families of 5 or more for about one-third.

Payments on consumer debts.--Approximately 4 out of 5 of the 365 families made payments between July 1, 1968 and June 30, 1969 on consumer debts assumed that year and/or left over from earlier years. The older families (husband 35 to 44 years) and those with more income and education were slightly less likely than others to be paying on debts. Families in which the wife was a full-time homemaker were also less likely to be making payments than families in which the wife was employed.

The amounts paid on debt averaged \$634 for the families surveyed and \$806 for those making payments. Families with incomes \$10,000 and over paid more than those with less income, and families with employed wives paid more than those in which the wives were full-time homemakers.

Of the 365 families surveyed 21 percent were making no payments on consumer debt. About 30 percent allocated between 10 and 19 percent of their after-tax incomes to debt payments--the level reported by the largest number of families. About 12 percent of the families allocated 20 percent or more of their incomes to debt payments. Families with income under \$5,000 were much more likely than others to be indebted to this extent. The percentages of after-tax income allocated to consumer debt payments by the families surveyed were as follows:

<u>Percent of income (after tax)</u> <u>paid on consumer debts</u>	<u>Percent of</u> <u>families</u>
None -----	21
More than 0 but less than 5 percent	16
5 to 9 percent -----	19
10 to 19 percent -----	30
20 percent or more -----	12
No income given -----	2

Credit transactions.--Of the 365 families surveyed 211 or 58 percent reported one or more credit transactions of \$100 or more during the year. Almost 60 percent of these made one credit transaction only, 25 percent made 2, and 15 percent made 3 or more.





Families making only one credit transaction of \$100 or more used loans in 56 percent of these transactions, the installment purchase plan in 40 percent, and a charge account in 4 percent. Only families with income under \$5,000 used the installment plan more than a loan. (In this paper, "installment plan" refers to credit arranged with the retailer making the sale; "charge account" refers to what is often called a revolving or budget account--i.e., an account to be paid in monthly payments over a period of time with interest added. Purchases made on a 30- to 90-day no-interest account were considered cash transactions.)

Families making two or more credit transactions during the year were more likely to use two types of credit than one, and none used all three types. Most often used was a combination of loan and installment purchase plans. Use of charge accounts may have been limited by the kinds of goods financed--for example, cars--and the amount of credit--\$100 or more--per transaction.

Sources of loans.--More families used loans from banks than from all other sources combined. Families with income under \$5,000 were an exception, for they used loans from loan companies about as much as from banks. Credit union loans were used by relatively more families headed by college graduates than others--meaning, perhaps, that they more often had a credit union available where they worked.

Knowledge of interest rates.--Like families in many earlier studies, few of these knew the rate of interest being charged on the consumer debts they had assumed during the year. When asked what the interest rate was, they answered "don't know" for 67 percent of the credit transactions. Many more families seemed to know the extra dollar cost of credit than knew the interest rate.

### Future Work

These findings are a small part of the information to be obtained from this study. They will serve as a background for the data on family decision making which are still being tabulated.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

TIME-USE PATTERNS FOR HOUSEHOLD WORK RELATED TO HOMEMAKERS' EMPLOYMENT

Talk by Kathryn E. Walker  
New York State College of Human Ecology  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 1:30 p.m., Wednesday, February 18, 1970

Those who look to the future often predict drastically reduced work time for everyone--men, women, and children. The futurists tell us that we may expect to live in a push-button world; of course, they have been telling us that for 20 years. We do push buttons today, but a drastically reduced work time still seems to be a dream as we examine the time-use data from a 1967-68 survey of 1296 husband-wife families in the city and suburbs of Syracuse, N. Y.

Method of Study

The sample was drawn from names of 45,000 husband-wife families, arranged by city and suburbs and by the number and ages of children--the major control variable. From pools of names so arranged, 42 families were randomly selected for each of 32 classifications of family composition. The types of families sampled included families with no children and with 1, 2, 3, 4 to 6, and 7 to 9 children; families with youngest child under 1 year of age, 1 year old, 2 to 5, 6 to 11, and 12 to 17 years of age; and families with all children of the same age and with varying combinations of ages. In families with no children, age of the homemaker was the control variable. Families with adults other than husband and wife were excluded from the sample.

No attempt was made to control socioeconomic status, but it was assumed that families with high, middle, and low socioeconomic status would be selected randomly in the same proportion that they existed in the population. Likewise, employment of the homemaker was a random variable.

For each family, time records were completed for 2 days for each member 6 years of age or older. The resulting 2592 records were equally distributed among the days of the week and seasons of the year. Interviewers asked homemakers to recall time use for the day before the interview. Time use was recorded for household work and other work in 10-minute intervals.

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Dr. Walker is principal investigator for the research partially reported in this talk. The research project, "Time Use for Household Work," is financed by funds provided by the State of New York and a grant from the Agricultural Research Service of the U.S. Department of Agriculture. Mrs. Irma Telling, research associate, assisted in developing the data presented.



## Definition of Household Work

The word work is defined in many ways and with variations in interpretation by physiologists, physicists, psychologists, economists and sociologists. In this project the term household work is used to designate the multiplicity of purposeful activities performed to provide the goods and services used by the family in order that they may function as a family. While industry produces a great variety of the goods used by families, some goods and many services continue to be provided by families for their members.

Work performed to provide money income with which to buy goods and services was classed as employment work. Such work and work done without payment in money, as school work and volunteer work, were classified as "other work" (i.e., work other than household work).

## Many Work Hours for Husbands and Wives

Very often when the futurists discuss reduced work time for tomorrow, they start with an assumed 40-hour work week for today. While one-third of the husbands in our sample did work the traditional 40-hour week, another one-fifth worked 41-49 hours and another one-third worked 50 hours or more. Only 11 percent worked less than 40 hours, and surprisingly 5 percent worked 70 hours or more for pay. Many men worked at more than one job, and many business and professional men also worked long hours.

When all work time was combined, i.e., time for employment work, household work, and volunteer work, men and women in the Syracuse sample fit the picture of a work-oriented society.

Because each day of the week was equally represented in our data, it is appropriate to multiply the average daily figures for seven for a picture of the total work week. The average work week for the 1296 women in the Syracuse area was 63 hours and for men it was 64 hours! (Table 1) In families with no children it was a somewhat shorter work week, but even then it was 55 and 57 hours for women and men, respectively. As the number of children increased the average total work time increased somewhat for both men and women.

## Work Roles of Men and Women

For the past 20 years we have been told that the work roles of men and women are changing. Many have said that now husbands and wives go out to work, and husbands and wives share in the family's work. It is true that changes are taking place. However, as we examine data from the 1296 families in our sample, this change is far less dramatic than suggested by the generalizations often made about shared work.

The average time contributed by husbands for the household's operation was 11 hours per week as compared with the average of 51 hours for wives. Just the reverse was true for paid and volunteer work; men averaged 53 hours and wives 12 hours per week. In our sample, as in the nation, almost



Table 1. Average Hours per Week Used for all Work by Husband and Wife  
Relative to Number of Children  
(1296 husband-wife families, Syracuse area, 1967-68)

No. of Children	N	<u>Total Work</u>		<u>Household Work</u>		<u>Other Work</u> (Paid & Volunteer)	
		Wife	Husband	Wife	Husband	Wife	Husband
Hours per week							
0	168	55	57	34	9	20	48
1	210	59	64	48	11	12	53
2	378	65	66	55	12	11	54
3	294	65	64	54	10	11	53
4	169	66	67	57	11	8	56
5+	77	69	71	61	13	8	58
Average for all Families	1296	63	64	51	11	12	53





two-thirds of homemakers in husband-wife families did not work for pay. Many of the women who were employed worked less than 40 hours per week; only 9 percent of the sample worked for pay 40 hours or more in the week previous to our interviews.

#### Help with Household Work Contributed by Family Members

The time per day used for household work by homemakers and by all workers decreased considerably as the length of employment increased. (Table 2) If the homemaker was a full-time homemaker she used an average eight hours per day in household work, while those who were employed 30 or more hours per week used only five hours per day. In contrast the husband's time remained the same, on the average, whether the homemaker worked full-time as a homemaker, was part-time employed, or was employed 30 or more hours per week. It averaged 1.6 hours per day.

The time contributed by children and other helpers did vary somewhat with employment. When we look later at these figures in relation to family composition the picture will be in better focus, because not all families had children in the 6-17 age group.

In food preparation related activities husband's time did increase from about 6 to 12 minutes per day, on the average, as the homemaker's employment work time increased. (Table 3) The homemaker's time in food activities decreased from two and one-fourth hours for full-time homemakers to one and one-half hours for those who worked 30 or more hours per week. The children contributed less than 25 minutes to the total and outside helper's time was negligible.

In house care activities, the care of inside and outside the house (i.e., yard and garden) was included; the care of the family's second "house," their car, was also included. It was in the house maintenance and yard care areas that husbands have traditionally made a significant contribution, and here they contributed well over one-half hour per day in the 1967-68 survey. In the regular house care, the wife's time and the children's time were greater than husband's time. Note that the wife's time decreased here as it did in every area as she was employed longer hours.

In clothing care activities the homemaker's time was within five minutes of all worker's time, on the average. This was an area in which she received little help, whether or not she was employed.

In the family care activities the husband's contribution shows up with around 20 minutes per day being given, on the average. This was less often physical care of children than "other" care - such as helping children with lessons, chauffeuring them to scout meetings, etc. There was more time by other helpers in this area, also, when the homemaker was employed more than 15 hours per week.

Husbands also helped in marketing and record keeping, contributing about 25 minutes, on the average, whether or not the homemaker was employed.

It appears from these records that wives continue to do most of the in-the-home work and that husbands continue to do yard work, home maintenance,



Table 2. Average Hours per Day Used by Homemaker and Others for all Household Work  
Relative to Number of Hours per Week Wife Worked for Pay  
(1296 husband-wife families, Syracuse area, 1967-68)

Family Members	Wife's Hours/week of Paid Employment				Average for All
	0	1-14	15-19	30+	
	N=859	N=120	N=111	N=206	N=1296
	Hours/day				
Wife	8.1	7.3	6.3	4.8	7.3
Husband	1.6	1.7	1.6	1.6	1.6
Other Workers	1.4	1.6	2.0	1.6	1.5
All Workers	11.1	10.6	9.9	8.0	10.4



Table 3. Average Hours per Day Used by Family Members for Household Work  
Relative to Wife's Employment  
(1296 husband-wife families, Syracuse area, 1967-68)

Household Activities Performed by Family Members	Hours/week of Wife's Employment			
	0 hours	1-14 hours	15-29 hours	30+ hours
	Hours/day			
Food-related Activities				
Wife	2.3	2.2	1.9	1.5
Husband	.1	.1	.2	.2
Children	.3	.4	.4	.4
Other Helpers	*	*	*	*
All Workers	2.7	2.7	2.5	2.2
House-care Activities				
Wife	1.6	1.4	1.3	1.1
Husband	.6	.7	.6	.6
Children	.4	.4	.4	.4
Other Helpers	.1	.1	.1	.1
All Workers	2.7	2.6	2.4	2.2
Clothing-care Activities				
Wife	1.3	1.3	1.1	.8
Husband	*	*	*	*
Children	.1	.1	.1	.1
Other Helpers	*	*	*	*
All Workers	1.4	1.4	1.3	.9
Family-care Activities				
Wife	1.9	1.4	1.1	.6
Husband	.4	.3	.4	.3
Children	.1	.2	.1	.1
Other Helpers	.2	.2	.5	.2
All Workers	2.6	2.1	2.1	1.2
Marketing, Management and Recreation				
Wife	1.0	1.0	.9	.8
Husband	.4	.4	.4	.4
Children	.2	.3	.3	.2
Other Helpers	*	*	*	*
All Workers	1.7	1.7	1.6	1.5

\*Less than .1 hour



help with the marketing, record keeping and socializing types of activities with children.

Possibly if we had comparable records for 20 or 40 years ago we could see a change in help from husbands - more sharing of the work today. Possibly, the report of some time for husbands on 80 percent of the record days is a big change.

Possibly there is change shown by the fact that on one-third of the days reported husbands did something in the areas of food preparation, care of family members, other than physical care, and marketing? For each of the 14 activities studied two-thirds or more of the husbands contributed no time. It may be surprising that on 88 percent of the days no time was given by husbands in after-meal clean-up and that on 95 percent of the days no time was given by them in laundry activities. On the other hand, on 12 percent of the days all of the marketing that was done was done by husbands; on 17 percent of the days all of the time that went into house maintenance, yard and car care was done by husbands. On one-half of 1 percent of the days husbands did all of the meal preparation and the dishwashing! This was reported on 16 of the 2592 days for which we collected records.

I am not taking the position that husbands should do more than they do or less than they do. My concern is that too often generalizations are made that can not be supported by fact. At least, there was not an equal sharing of work of homes in the Syracuse area.

It appears from these records that there is very little difference in the time that is contributed by husband and other family members when the wife is employed, but this picture is not complete, because women tend to go to work at those times that the work load at home is light. Whether or not homemakers in this sample were employed and the number of hours they were employed related closely to the presence of children in the home, their ages, and somewhat to the age of the homemaker. (Table 4) While 34 percent of the sample were in the labor force, this percentage was much higher in families with no children and in families with teenage children.

In families with no children, about two-thirds of the homemakers were employed if the homemaker was under 40, and this proportion decreased to one-third for homemakers over 55. (Table 5) When there was a baby in the family a very large percentage of homemakers were at home full time (more than 80 percent of them), but there was some variation by age of the homemaker.

If the youngest child was of pre-school age a much larger percent of very young mothers were employed than were employed if she was over 25 years of age.

When the youngest child was of school age, the percentage of homemakers employed was much greater than for families with young children. One-half of the 40 to 54-year-old mothers of teenagers were employed, and two-thirds of the under-40-year-old mothers of teenagers were in the labor force.





Table 4. Percentage of Homemakers Employed  
Relative to Number and Age of Children and Age of Homemakers  
(1296 husband-wife families, Syracuse area, 1967-68)

Categories	Total Number of Families	Percent of Homemakers Employed 1+ hours/week	Percent of Homemakers Employed 15+ hours/week
<u>Number of Children</u>			
0	168	51	42
1	210	38	29
2	378	32	22
3	294	32	21
4	169	24	18
5+	77	14	14
<u>Age of Youngest Child</u>			
Under 1 year	197	17	8
1 year	183	18	11
2 - 5 years	311	29	20
6 - 11 years	296	40	29
12 - 17 years	141	55	43
<u>Age of Homemaker</u>			
Under 25	153	38	29
25 - 39	770	30	21
40 - 54	325	41	30
55+	48	35	25
<u>All Families</u>	1296	34	24



Table 5. Percentage of Homemakers Employed and Hours of Employment  
Relative to Age of Homemaker, Presence of Children and  
Age of Youngest Child  
(1296 husband-wife families, Syracuse area, 1967-68)

Age of Homemaker	Age of Youngest Child	N	Percent Homemakers Employed 1+ hrs/wk.	Hours/week of Wife's Employment		
				0	1-29	30+
(Percent employed)*						
Under 25 years (N=153)	No children	42	67	33	10	57
	Under 1 year	58	19	81	12	7
	1 year	37	24	76	22	3
	2-5 years	16	63	38	38	25
25-39 years (N=770)	No children	42	64	36	12	52
	Under 1	130	12	87	9	4
	1 year	137	15	84	12	4
	2-5 years	239	29	71	17	12
	6-11 years	194	38	61	22	16
	12-17 years	28	68	32	43	25
40-54 years (N=325)	No children	42	41	60	17	24
	1 year or less	18	33	67	22	11
	2-5 years	56	21	79	11	11
	6-11 years	102	42	58	27	15
	12-17 years	107	51	49	22	30
55+ years (N=48)	No children	42	33	67	17	17
	12-17 years	6	**	**	**	**

\* Percents do not always add to 100 due to rounding

\*\* N = Less than 10



The length of the homemaker's work week in the labor force again related closely to children in the family, their ages, and age of the mother. More than one-half of the women under 40 years of age with no children were employed 30 or more hours per week, while this dropped to less than one-fourth of such women over 40. On the other hand, in those families in which there were children, homemakers tended to work part-time.

### Effect of Employment and Family Composition on Household Work Contributions

To examine the effect of employment on the work contribution of various family members in different types of families we have set up the employment classification of 1) less than 15 hours per week and 2) 15 or more hours per week.

#### Number of Children

The wife's family work time increased with the increase in number of children whether or not she was employed. However, those employed consistently used at least two hours less in household work whether she had no children, 1, 2, 3, 4, or more children. A similar reduction in all worker's time was also apparent. There were only slight variations in all helper's time (i.e., husband, children and others). Those employed over 15 hours per week received more help from children in 2, 3, and 4 children households. Mothers also had somewhat more help from others when they were employed 15 hours or more. These women did about 60 percent of all household work done as compared with 70 percent for those employed less time. (Table 6)

#### Age of Homemaker in Families with No Children

If homemakers were under 40 and employed 15 or more hours per week, they averaged somewhat more help time from husbands, close to one and one-half hours as compared with about an hour for those at home more of the time. In contrast, older homemakers who were employed more hours received less help from their husbands than did those who were not employed or were employed for only a few hours. Neither hours of employment nor age of homemaker adequately explain the variations. All adult households had very little help reported other than that contributed by husbands. (Table 7)

#### Age of Youngest Child

If the youngest child was a baby, relatively few mothers were employed 15 hours or more per week (36 compared with 344). However, those who were employed did receive considerably more help from husbands and other helpers, both older children and hired helpers. Only in this category was more time used for household work in the employed homemaker families than in others. If the youngest child was of school age, families received help for close to two hours from children. I wish I might tell you that these differences are significant but the statis-



Table 6. Average Hours per Day Contributed by Wife, Husband, Children and Other Helpers for all Household Work  
Relative to Employment of Homemaker and Number of Children in Family  
(1296 husband-wife families, Syracuse area, 1967-68)

Employment of Homemaker	Number of Children	Number of Families	Wife	Husband	Children	Other Helpers	All Workers
(average hours/day)							
0-14 hours/ week	0	97	5.7	1.4	--	0.1	7.2
	1	149	7.4	1.7	0.2	0.3	9.7
	2	295	8.4	1.6	0.6	0.4	11.0
	3	233	8.1	1.5	1.6	0.4	11.6
	4	139	8.7	1.6	1.6	0.4	12.3
	5+	66	9.9	1.8	4.1	0.3	15.2
All Families		979	8.0	1.6	1.1	0.4	11.1
15+ hours/ week	0	71	3.7	1.2	---	*	5.0
	1	61	5.1	1.4	0.5	0.6	7.7
	2	83	5.9	1.9	1.1	0.9	9.8
	3	61	6.0	1.7	2.6	0.4	10.8
	4	30	6.2	1.5	2.7	0.5	10.9
	5+	11	6.4	2.2	3.3	0.7	12.7
All Families		317	5.3	1.6	1.2	0.5	8.7

\*Less than .1 hour





Table 7. Average Hours per Day Contributed by Wife, Husband, Children and Other Helpers for all Household Work Relative to Employment of Homemakers and Age of Youngest Child in Families or Age of Homemaker in No-children Households (1296 husband-wife families, Syracuse area, 1967-68)

Employment of Homemaker	Type of Family	Number of Families	Wife	Husband	Children	Other Helpers	All Workers
(average hours/day)							
0-14 hours/ week							
	No children:						
	Wife under 25	16	5.1	0.9		0.2	6.2
	Wife 25-39	19	6.0	1.2		*	7.2
	Wife 40-54	30	6.1	1.4		*	7.6
	Wife 55+	32	5.3	1.8		0.2	7.3
	Youngest child:						
	Under 1	181	9.5	1.7	0.5	0.6	12.2
	1 year	163	8.5	1.7	0.6	0.4	11.1
	2-5 years	248	8.2	1.6	1.0	0.4	11.1
	6-11 years	210	7.6	1.6	2.1	0.3	11.6
	12-17 years	80	7.0	1.5	2.1	0.2	10.8
15+ hours/ week							
	No children:						
	Wife under 25	26	3.5	1.4		*	4.8
	Wife 25-39	23	3.7	1.4		*	5.1
	Wife 40-54	12	4.0	0.8		*	4.9
	Wife 55+	10	4.1	1.0		0.1	5.2
	Youngest child:						
	Under 1	16	7.5	2.9	1.1	1.7	13.2
	1 year	20	7.0	2.5	0.8	1.1	11.3
	2-5 years	63	6.0	1.7	0.7	0.9	9.4
	6-11 years	86	5.8	1.3	1.8	0.4	9.3
	12-17 years	61	4.8	1.6	2.7	0.3	9.4

\*Less than .1 hour



tical tests have not yet been made. Whether or not the differences are significant when homemakers are employed or not, it seems important to note that approximately two hours of help per day was received by families from children. On the average it was close to one hour per child. Of course, averages have major defects as they hide much larger contributions by some and little or nothing by others. We so often hear that school children do nothing at home today, but in the Syracuse area, at least, their contribution was strongly evident. Almost 30 percent of the total household work load was contributed by teenagers in families in which there were no younger children and the mother was employed 15 or more hours per week; 20 percent was contributed by this group in families in which the mother was not employed or worked fewer hours.

#### Total Work Load for Husbands and Wives Related to Wives' Employment

I have referred to average total work loads for husbands and wives being heavy. Now let us see how these compare when wives were employed 15 or more hours per week with the families in which she was not in paid employment or did less than 15 hours of such work per week. (Table 8)

The husband's total work time varied little whether or not the homemaker was employed, while the wife's total work week was consistently heavier when she was employed.

In families in which there were children employed wives had around a 70-hour work week as compared with a slightly shorter work week if there were no children. Women in households with no children had a 40 to 50 hour work week if they were not employed or worked for pay less than 15 hours per week.

It was the woman who paid most in time when she was employed outside the home. Who can say whether the reduced total time for all workers was desirable or undesirable? Who can say if the work left for children was significant for their development? Who can say if the social gains or the economic gains were more significant?



Table 8. Average Hours per Week<sup>1</sup> Used by Husband and Wife for all Work<sup>2</sup>  
 Relative to Family Composition and Employment of Homemaker  
 (1296 husband-wife families, Syracuse area, 1967-68)

Family Composition	Employment of Homemaker					
	15+ hours/week			0-14 hours/week		
	Number of	Wives' Total	Husbands' Total	Number of	Wives' Total	Husbands' Total
	Families	Work Time Hours/week	Work Time Hours/week	Families	Work Time Hours/week	Work Time Hours/week
No children	71	66	58	97	49	57
1 child	61	67	64	149	56	65
2 children	83	71	67	295	63	65
3 children	61	75	63	233	62	64
4 children	30	69	61	139	65	69
5+ children	11	80	70	66	67	71
<u>Youngest Child:</u>						
Under 1 year	16	73	68	181	70	68
1 year	20	68	63	163	63	65
2 to 5 years	63	71	68	248	61	68
6 to 11 years	86	71	62	210	60	65
12 to 17 years	61	72	66	80	55	59
<u>No Children:</u>						
Wife's Age						
Under 25 years	26	69	61	16	42	54
25-39 years	23	65	60	19	49	75
40-54 years	12	62	55	30	47	59
Over 55 years	10	64	48	32	45	46

1 Since each day is equally represented in the data, the average daily figures were multiplied by 7 for the weekly figures.

2 All work represents paid, volunteer and household work.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

THE AGRICULTURAL INDUSTRY

Talk by Eldon E. Weeks\*

Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
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Information contained in the recently published national input-output study for 1963 provides the basis for this discussion of the size, structure, and pervasiveness of American agriculture.<sup>1/</sup> In addition, the discussion serves as an illustration of potentials for wider acknowledgement of the economic intelligence that can be developed by use of the input-output framework.

The 1963 National Input-Output Study

The 1963 national input-output study was published in more than 370-sector detail.<sup>2/</sup> Included were 10 agricultural production sectors, 32 food and kindred products sectors, 2 tobacco manufactures sectors, 21 textiles, fabrics, and apparel sectors, and 4 leather and leather products sectors.

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<sup>1/</sup> National Economics Division, Office of Business Economics, U.S. Department of Commerce, "Input-Output Structure of the U.S. Economy: 1963," Survey of Current Business, November 1969, pp. 16-47 and Ibid. Vol. 1--"Transactions Data for Detailed Industries," A Supplement to the Survey of Current Business, 1969.

<sup>2/</sup> Ibid.





A 370-sector model of the United States economy provides enough detail to afford a considerable degree of flexibility for the use of small models that are highly aggregated in some sectors and highly disaggregated in others. This is a convenient feature for many possible uses of the basic data. The model discussed in this paper represents such an arrangement of the data presented in the national study.

### Purposes for Constructing a Special Model

Use of small computers and remote use of large computers often rather severely constrain the size of certain data manipulation models. Let's say that such a scale constraint is the price one must often pay for convenience and quick accessibility to computer facilities. In this instance, the efficient provision of quick answers to questions dictates the use of compact models.

The model discussed in this paper was formulated from the 370-sector national study. We wanted a model of the U.S. economy not to exceed 30 sectors, with as much detail as possible in the agricultural and agricultural product processing sectors, to emphasize the structure of American agriculture and the relations between agriculture and the rest of the economy. We felt we wanted this model for essentially two purposes. One is to attempt to provide better answers for some of the kinds of questions often asked. The other is for experimentation. This paper is concerned chiefly with the first purpose.

### Sector Plan

The 370-sector national model contains 10 agricultural product producing sectors. The model presently discussed includes all 10:

- (1) Dairy farm products
- (2) Poultry and eggs
- (3) Meat animals and miscellaneous livestock products
- (4) Cotton
- (5) Food, feed grains and grass seeds
- (6) Tobacco
- (7) Fruit and tree nuts
- (8) Vegetables, sugar, and miscellaneous crops
- (9) Oilbearing crops
- (10) Farm forest, greenhouse, and nursery

It was impossible to include all the detail available in the agricultural product processing sectors and keep the model within the indicated size limit. Consequently, an attempt was made to sector these industries consistent with the best possible correspondence between the agricultural production sectors and the industries which process their particular outputs. The agricultural product processing sectors include:

- (1) Meat products
- (2) Dairy plants



- (3) Canning, freezing, dehydrating (except seafood)
- (4) Feed and flour milling
- (5) Sugar plants
- (6) Fats and oil mills
- (7) Confectioneries, bakeries, and macaroni
- (8) Beverages and flavorings
- (9) Miscellaneous products
- (10) Tobacco manufactures
- (11) Textiles, apparel, and fabrics
- (12) Leather products

Other industrial sectors in the model include other resource industries (forestry, fishing, mining), all other manufacturing, transportation and warehousing, wholesale and retail trade, and other noncommodity industries. Finally, the importing of inputs is treated as a domestic activity.

Value added for an industry is a term comparable in concept to gross national product originating in the industry.<sup>3/</sup> It is made up of capital consumption, indirect business taxes, and payments to factors of production employed in the industry. Value added is shown in the gross flows and direct requirements tables (1 and 3) as a purchase category in the disposition of each industry's receipts.

The final markets include:

- (1) Personal consumption
- (2) Private domestic capital formation
- (3) Net inventory change
- (4) Net exports
- (5) Federal government purchases
- (6) State and local government purchases

Purchases by final use sectors make up the bill of goods the economy---each industry and in the aggregate, is called upon to produce in final form for domestic consumers, government, foreign sales, and other final uses.

#### Total Sales and Their Distribution

Table 1 shows the dollar value in producer prices of the transactions among the various industries. Each row shows the sales from the industry named on that row to purchasing industries and to the final users of its products as identified at the heads of the columns. For example, row 5 for grains and seeds shows sales to such industry groups as dairy, poultry, and livestock as well as sales to consumers, government, and foreign purchasers.

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<sup>3/</sup> As used here, the term value added is not the same as the term value added by manufacture. Most of the difference in the two concepts is found in the treatment of purchased business services, which are embodied in the latter measure but not in the first-mentioned one.



Most of the output of American agriculture is sold as intermediate products for further processing rather than as final products. This observation is neither new nor surprising. In 1963 only about 16 percent of the output of agriculture was sold directly to final demand through the trades without further processing.

The proportions of sales as intermediate products for further processing ranged from about 49 percent for vegetables and sugar, for example, to about 97 percent for milk and meat animals.

More than 90 percent of the direct sales to final users were for personal consumption, exports, and net inventory increase. The largest direct deliveries for personal consumption consisted of vegetables, eggs, and fruits and tree nuts. Net inventory buildup was largest in the tobacco, grain, and poultry and egg sectors. The largest exporting sectors were grain, cotton, and oil-bearing crops.

The remaining 84 percent of farmers' sales went to industrial purchasers. As a proportion of total output, food and kindred products account for about 42 percent, agriculture itself for 21 percent, real estate and rentals for 5 percent, textiles, fabrics, and apparel for 3 percent, and tobacco manufacturers for 2 percent. The remaining 11 percent of agriculture's sales are accounted for as relatively small proportions sold to a number of other industries.

While farmers sold 84 percent of their output as intermediate products, the agricultural product processing industries sold roughly 64 percent of their output directly to final demand. Of the amount sold directly to final demand, \$74.6 billion or 94 percent was to personal consumption.

The food and kindred products industries sold 22 percent of their total output and 78 percent of their deliveries as intermediate products either to themselves or to farmers. The remaining 14 percent of their total sales as intermediate product sales were distributed among other industrial purchasers.

The nonfood agricultural product processing industries sold from two-thirds to three-fourths of their output directly to final demand. Most of the industrial sales by these industries were to other firms within the industries themselves, such as sales by thread mills to textile manufacturers.

#### Purchases and Their Distribution

Even a general summary of sales and purchases data is overloaded with empirical detail. Perhaps the only way the presentation of so much detail can be justified is because it is important to know the markets for farm products and how important each is as we try to assess business prospects. This section summarizes purchases by the agricultural and agricultural product processing industries (tables 1 and 3).





The 1963 gross national product was \$590.4 billion. About 3.6 percent originated directly in agriculture and about 5.7 percent originated directly in the agricultural product processing industries.

Livestock farmers (dairy, poultry, and meat animals) spent from 68 to 83 percent of their sales dollars purchasing intermediate inputs. They spent from a third to more than half of their gross receipts for feed grains and processed feeds. They were also heavy purchasers of replacement livestock, primarily from within their own industry. These farmers spent from 9 to 21 percent of their gross receipts on purchases from the non-commodity industries.

Cotton farmers spent about 54 percent of their gross receipts on intermediate inputs. About 35 percent of total receipts was spent with the non-commodity industries and about 10 percent with manufacturing industries, primarily for chemical and petroleum products.

The remaining crop sectors spent less than half their gross receipts on intermediate inputs. Still, from 13 to 25 percent of their gross receipts were spent in the non-commodity industries and from 6 to 13 percent in the other manufacturing industries. We should remember that these purchases were for operating inputs on current account. They do not include purchases for capital account. Therefore, purchases of machinery and equipment, new buildings, and land improvements are not shown in the agricultural sectors.

Food and kindred products firms typically spent from 46 to 90 percent of their gross receipts on intermediate input purchases. Confectioneries, bakeries, macaroni producers, beverage and flavoring manufacturers and miscellaneous food manufacturers spent very little of their gross receipts as purchases directly from farmers. They tended to spend about 15 percent of their receipts with the non-commodity industries, from 9 to 13 percent with other manufacturing industries, and from 15 to 30 percent with other food and kindred products industries.

Meat plants spent 61 percent of their gross receipts on purchases from farmers and 11 percent on purchases from each other. Dairy plants spent 40 percent of their gross receipts on purchases from farmers and 23 percent on purchases from among themselves, while they both spent 8 percent of their gross receipts on purchases from the non-commodity industries.

Canning, freezing, and dehydrating and sugar plants spent about 15 percent of their gross receipts as purchases from farmers. Canning freezing, and dehydrating plants spent about 20 percent of their gross receipts with other manufacturing industries while sugar plants spent about 25 percent of theirs on imported goods.

The patterns established in the other industries are essentially true also for feed and flour mills and for fats and oils mills. They spent from one-fourth to one-third of their gross receipts on purchases from farmers, 15-20 percent on purchases from the non-commodity industries, and 25-35 percent





on purchases from among themselves and from other food processing industries.

In general, more than half of a farmer's gross receipts went for inputs that are "used up" in the annual production period, and less than half were retained for payments to the factors of production, capital consumption and indirect business taxes. Two-thirds or more of the gross receipts of the agricultural products processing industries were used to purchase intermediate inputs. These proportions of expenditures on intermediate inputs are high compared with most of those for the rest of the economy. This should lead us to expect a high degree of interrelatedness between agriculture and other economic sectors in any analysis of impacts of prospective change.

Exports of the farm and agricultural products processing industries amounted to \$5.4 billion, or 17 percent of the Nation's total exports. Imports, on the other hand, amounted to \$3.7 billion, or about 14 percent of the Nation's imports. These industries, then, contributed a positive net of \$1.7 billion to the Nation's balance of trade for 1963.

#### Economic Interdependencies

Coefficients in table 4 show the total production that would occur in each industry that is related to the sale of \$1.00 worth of output to final demand by each industry as identified at the top of the column. The data include both the direct and the indirectly induced production. The columns can be summed to estimate the total production in the U.S. economy that is required, on the average, to provide a \$1.00 sale to final demand by the industry identified with any particular column.

The first thing one notices is that every industry is directly or indirectly related to every other industry to some extent. For example, the sale by a dairy farmer of a dollar's worth of his output directly to a final user directly or indirectly results in some production in every one of the 28 industry sectors used in this appraisal. Dairy farmers, of course, must produce that amount of output and slightly more to account for total demands on them. While all other industries are called upon for some amount of output, those affected most are feed grain producers and feed millers, other manufacturing, transportation and warehousing, wholesale and retail trades, and other non-commodity industries. As a matter of fact, the dollar of sales by dairy farmers is directly or indirectly related to \$2.41 worth of output, in total, in the U.S. economy (table 4).

In this formulation of the U.S. economy the 11 largest total output multipliers are in the agricultural and agricultural product processing industries. Nine other farm and agricultural product processing industries have total output multipliers higher than the one indicated for other non-commodity industries.

With the rest of the U.S. economy collapsed into 5 sectors, these 5 sectors benefit as much from sales of food and fiber products as they do from sales by the other nonagricultural sectors. In general, the commercial



dependencies are as strong between the agricultural and nonagricultural industries as they are among the nonagriculturally oriented industries.

Increases in production in the farming and agricultural product processing industries call forth more output from nonagricultural industries than vice versa. This simply reflects the observation that the predominant markets for farm output are the agricultural product processing industries and the predominant markets for the products of these industries are final consumption, while many inputs for both farming and agricultural product processing are supplied from other sectors in the economy.

Deliveries of food and fiber products to final demand by farmers and agricultural product processors do require accompanying inputs from the transportation and trade sectors. In the formulation shown here, final delivery services of these industries are included in the final purchases from these sectors by the final demand categories as shown in table 1. They are not disaggregated for separate scrutiny.

#### Distribution of Output to Final Demand Categories

Directly or indirectly all agricultural output reaches final consumers. So does the output of the food and kindred products industries. As we have noted before, some of this output reaches final demand directly and some of it gets there in the form of deliveries by other industries. Table A is a summary of the proportions of the total output of livestock and livestock products, other agricultural products, and food and kindred products that reach each category of final demand directly, indirectly, and in total.

Here we can document earlier observations about final markets for agricultural products. Domestic personal consumption accounts for the predominant final use of agricultural output. This category of final demand ultimately accounts for 89 percent of livestock and livestock product output and 75 percent of the output of other agricultural products. It also accounts for 92 percent of the output of the food and kindred products industries.

Most of the output of agriculture is sold to personal consumption as direct deliveries from the food and kindred products industries. This is reflected by the fact that 82 percent of the output of livestock and livestock products and 64 percent of the output of other agricultural products are delivered into personal consumption indirectly. Moving up one step in the distribution system, 67 percent of the output of the food and kindred products industries is delivered directly to domestic personal consumption while 25 percent is delivered there indirectly. The remaining 8 percent is delivered directly or indirectly to other categories of final demand.

Foreign countries loom large as markets for the cropping sectors of American agriculture. They accounted for 14 percent of the output of these sectors in 1963.



Table A.--Total, direct, and indirect output attributable to each category of final demand, 1963

Category of Final Demand	Livestock and livestock products		Other agricultural products		Food and kindred products industries	
	Total	Direct:Indirect	Total	Direct	Indirect	Total
	Direct	Indirect	Direct	Indirect	Direct	Indirect
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
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	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect	Direct	Indirect	Direct
	Indirect	Direct	Indirect			

Percent

Source: National Economics Division, U.S. Department of Commerce, "Input-Output Structure of the U.S. Economy, 1963" Survey of Current Business, November 1969, Table A, p. 21.

\*Less than .05 percent.





### Aggregate Producer--Final Market Margins

In the context of this presentation it is important to note the margins taken by transportation and the wholesale and retail trades for delivering the final product to the ultimate purchaser. They are alluded to but not separately identified elsewhere in the discussion. They are shown in millions of dollars for 1963 for livestock and livestock products, for other agricultural products, and for food and kindred products industries in table B.

In a structural description of the agricultural economy with the input-output technique, the transportation and trade margins between final producers and final purchasers are included in total purchases from those sectors by the final demand categories. The implication is that the final demand for a product carries with it a joint demand for outputs from the transportation and trades industries.

About the only general statement that can be made about the relative sizes of the trade and transportation margins is that they vary. This is illustrated by the variations in purchaser prices in relation to producer prices for goods delivered for domestic personal consumption. For livestock and livestock products purchaser prices were 133 percent of producer prices. For other agricultural products purchaser prices were 219 percent of producer prices, while for food and kindred products they were 154 percent of producer prices.

When final use was domestic personal consumption, wholesale and retail trade margins were much higher than transportation costs. It is difficult to make such a generally conclusive statement about the relative size of transportation and trade margins when final uses of the products are in other final demand categories.

### Impacts of Agricultural Product Processing

This section illustrates the impacts of producing a dollar's worth of agricultural product for processing compared with selling it directly to final demand. The data were selected from the input-output tables in the appendix to this paper. The discussion centers around table C, constructed for this purpose.

For example, let's observe what happens in the U.S. economy if dairy farmers or oilcrop farmers produce a dollar's worth of output for direct delivery to final demand. This is shown in columns 1 and 3 of table C. The production of a dollar's worth of dairy products sold directly to final demand results in a total of \$2.41 worth of output in the U.S. economy. The similar figure for oil crops is \$2.02.

If that dollar's worth of milk, on the other hand, is sold to dairy plants for processing and then delivered to final demand, total output in the U.S. economy is \$7.61. The increase in total output in the U.S. economy is more than three times what it is if the milk is delivered directly to final





Table B.--Aggregate producer--final market margins, 1963

Category of final demand	Livestock and livestock products			Other agricultural products			Food & kindred products					
	Pro-ducer: prices	Trans-: port	Trade: mar-	Pur-chaser: prices	Pro-ducer: prices	Trans-: port	Trade: mar-	Pur-chaser: prices				
Personal consumption expenditures	1,762	77	503	2,342	2,868	565	2,853	6,286	49,921	1,124	25,671	76,715
Gross private fixed capital formation	0	0	0	0	0	0	0	0	0	0	0	0
Net inventory change	374	(*)	(*)	374	584	46	34	664	583	13	39	635
Gross exports	38	7	7	53	2,917	344	259	3,520	1,648	67	117	1,833
Federal government purchases	5	(*)	2	7	-92	6	5	-81	317	7	5	329
State and local government purchases	12	1	(*)	12	88	13	12	113	488	10	-227	271

Million Dollars

Source: National Economics Division, U.S. Department of Commerce, "Input-Output Structure of the U.S. Economy, 1963," Survey of Current Business, November 1969, Table B, pp. 22-23.

\*Less than \$500,000.



demand. The indicated distribution of output, by industry, can be observed in table C.

The delivery of a dollar's worth of oil crops to fats and oils mills would seem to be associated with \$10.97 worth of total output in the U.S. economy. This is more than 5 times what the total output in the U.S. economy would be if oilcrop farmers delivered these crops directly to final demand. It is perhaps relevant to point out that the sale of a dollar's worth of oil crops to fats and oils mills seems to be directly or indirectly related to \$1.68 worth of business by the non-commodity industries, including transportation and the trades, and \$1.18 worth of output by nonagriculturally oriented manufacturing industries.

This discussion is not intended to be a research report on impact analyses or to appraise policies. However, one of the structural realities of American agriculture is the impact of various agricultural activities on the size and distribution of total output in the economy.

Until we have a greater consensus of research results, this illustration of differential impacts should be viewed as an illustration and as a hypothesis for further investigation.

#### Concluding Observations

Talking about the structure of an economy is similar to talking about costs of commodity production. There is no one set of data that is right for all purposes. What a marketer or a student of product flows wants may be quite different from what forecaster wants, and what a forecaster wants may be quite different from what a policymaker or policy student wants.

Ours is obviously a very complex economy. It is even more complex than we imagine. Output decisions made and activated in one sector affect nearly every other sector to some extent. The empirical material presented here illustrates one set of estimates of the structural composition of the U.S. economy in a model that includes a modest amount of detail at the national level for farming and agricultural product processing.

The adhesive strength by which industries are related to each other can be used, as we said before, for several types of analytical purposes. The very fact that we have estimates of the degree of sector interrelatedness can point the way to broadening our assessment of impacts either from change or from forecasts of change. In short, input-output is, as much as anything else, an application of a way of thinking about the structure of the economy.

The ultimate purpose of any expository and analytical device is to yield or convey intelligence. Input-output analysis is one way of unifying a great deal of structural economic intelligence. Businessmen, educators, and policy-makers alike should be able to benefit significantly as this tool is adapted to yield specific information for their particular needs and missions.



Table C.--Impacts of producing one dollar's worth of farm product for  
direct sale to final demand and for processing

	(1)	(2)	(3)	(4)
Total output required from:	Direct from dairy farms	Dairy farms through dairy plants	Direct from oil crop farms	Through fats and oils mills
			Dollars	
Dairy farms	1.01	1.31	.02	.03
Grain farms	.46	.60	.06	.21
Cotton				.30
Oil crops	.01	.01	1.06	1.39
Meat products		.01		.36
Dairy plants		3.31		
Feed and flour milling	.13	.18	.02	.13
Fats and oils mills	.03	.04	.01	4.65
Other manufacturing	.25	.82	.27	1.18
Transportation and warehousing	.07	.14	.03	.34
Wholesale and retail trades	.08	.20	.05	.30
Other non-commodity industries	.28	.68	.30	1.04
Imports	.02	.07	.01	.25
Not elsewhere identified	.07	.24	.19	.79
Total	2.41	7.61	2.02	10.97





## APPENDIX

### What is Input-Output?

The first step in an input-output study is the assembly of interindustry sales and purchases. This gross flows table summarizes sales and purchase data on current account for all firms classified into industry groups. Sales for an industry can be seen by reading across the row for that industry and purchases can be seen by reading down the column.

In general a distinction is made between domestic industrial and final markets. Purchases and sales by industries within the economy to or from industries within the same economy are regarded as purchases and sales of intermediate goods. They will be used up in further production before they leave the economy through final sales for export, personal consumption, capital formation, government, etc. Purchases from outside the domestic industrial economy generally are made from foreign countries and households. Purchases from households are generally termed Value Added and include payments to productive factors, indirect business taxes, and capital consumption.<sup>4/</sup>

The sum of all value added is equal to gross national product which is also equal to the total value of sales to final demand. For each industry and for the sum of all industries, total sales are equal to total purchases.

The second step in input-output analysis is to compute the technical coefficients. All this means is that each industry's sales dollar is distributed over the items that it purchases (remember that for any industry total sales equals total purchases).

After intervening operations on the matrix of technical coefficients, the third step in input-output analysis is represented by a matrix of interindustry multipliers. In this sense an interindustry multiplier is simply a measure of how much output in the industry named on the row is directly or indirectly attributable to the delivery of \$1.00 worth of output to final demand by the industry named at the head of the column.

### What Is It Good For?

Perhaps the most readily apparent benefit from the construction of input-output tables is the disciplined assembly and presentation of a comprehensive model of the economy. The most obvious intelligence available is the pattern of direct flows of money and goods in the economy. This is the kind of information assembled in step 1. With some acuity and additional information, one can approximate physical quantities and job equivalents from such information. One can extend his understanding of the structural unity of an economy by examining also the relative distributions of contacts among its sectors. Thus the input-output model is both broader in scope and simpler to interpret than alternative ways of showing the same information.

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<sup>4/</sup> See P. 4.





The interindustry multipliers are more complex than the direct flows, but they contain possibly even more economic intelligence. This is because they contain both direct and indirectly induced production.

Input-output tables are frequently found appropriate for making impact analyses. Economists are often asked questions about the roles or importance of particular industries in an economy or to estimate the impacts of changes. Adequate answers to questions of either type require consideration of the trading relations among all sectors of the economy.

Questions of the first type reduce to identification of total production and income in the economy that is directly or indirectly related to the activity of a given segment of the economy. This is relatively easy to do with input-output tables but rather difficult and costly with alternative techniques.

Questions of the second type usually involve the acquisition of additional information, and good judgment must be used in making and interpreting the analysis. It should be remembered that input-output tables represent a specific quantified model of the structure of the economy. All output mixes, input mixes, and trading relations are specified in fixed proportions. One risks making interpretations of doubtful validity if the implications of these assumptions are not carefully explored with respect to each application.

Business economists are now experimenting with forecasting applications of input-output tables. Input-output would appear to add the refinement of a specified matrix of interindustry relationships to the general procedures of forecasting. For example, forecasts of the level of demand for transportation can be translated into estimates of the demand for specified airplane components and the demand for airplanes translated into the demand for chemicals.

#### Limitations

Despite its usefulness, input-output is not a panacea for all economic questions.

The model is static. The picture it presents of an economy is like a snapshot. Many aspects of motion are not contained in it.

Output mixes, input mixes, and trading relations are shown to exist in fixed proportions. There is no reason why, in reality, this must be so. As a consequence, we must examine the legitimacy of these assumptions with each application of the model.

Most models constructed so far have used industrial classifications so broad that detailed investigations are difficult. We know how to make more detailed models, but the desirability and additional cost of doing so must be established at the time the data framework is structured. The only alternative to this, given the desire to deal with commodities, is to assemble the data initially so that the model can be easily disassembled to the level of its commodity elements.



Final Demand Detail

Total	Personal	GROSS Private	Net	Net	Fed. Gov.	State &	Total	Total
: Intermediate	: Consump-	: fixed Capital	: Inventory	: Exports	: Purchases	: Local Gov.:	: Final	: Output
: Inputs	: tion	: formation	: Change	:	:	: Purchases:	: Demand	:
5,587.9	189.5	---	---	---	---	---	189.5	5,777.4
2,224.5	1,460.0	---	1.3	11.2	3.2	8.3	1,484.1	3,708.6
16,679.4	112.9	---	373.1	27.2	1.7	3.9	518.9	17,198.4
2,227.8	---	---	-73.4	521.8	417.1	---	855.5	3,093.2
12,335.6	2.7	---	211.1	1,726.1	-444.1	37.9	1,533.8	13,869.3
1,236.7	---	---	238.8	15.0	---	---	253.8	1,490.5
1,045.5	917.7	---	54.7	66.1	1.9	13.2	1,053.6	2,099.1
1,599.9	1,549.1	---	-21.4	121.8	8.2	27.8	1,685.5	3,285.4
1,727.8	10.6	---	174.4	452.8	-74.9	---	562.9	2,290.7
727.9	387.8	---	---	13.7	---	8.7	410.2	1,138.0
4,105.7	13,721.0	---	155.4	289.4	83.7	170.5	14,420.0	18,525.7
3,741.6	8,189.7	---	10.7	193.5	114.4	153.9	8,662.3	12,403.8
1,380.0	5,370.8	---	19.9	198.4	13.9	54.0	5,656.9	7,037.0
6,449.6	1,880.0	---	64.8	391.8	55.6	23.3	2,415.6	8,865.2
2,267.2	850.9	---	120.4	4.5	1.8	5.3	982.9	3,250.0
3,308.9	666.3	---	53.6	449.6	9.7	7.7	1,187.0	4,495.8
924.0	7,536.4	---	41.7	24.1	11.7	40.1	7,654.3	8,578.3
2,050.8	7,770.2	---	67.0	41.5	10.9	9.1	7,898.5	9,949.4
857.3	3,935.6	---	49.9	55.3	15.2	23.8	4,079.9	4,937.2
1,955.7	4,942.6	---	22.5	507.9	---	1.0	5,474.5	7,430.2
9,350.1	16,189.5	62.5	189.2	211.6	149.1	83.5	16,885.3	26,235.3
1,357.0	3,032.0	---	-55.4	59.0	4.5	.9	3,041.1	4,398.0
21,011.7	601.1	---	2.1	582.0	117.3	10.4	1,312.8	22,324.8
238,711.7	53,309.1	27,960.2	3,521.2	13,988.0	24,579.0	3,371.7	126,729.1	365,441.0
24,741.3	8,945.8	574.4	152.2	3,039.0	1,320.1	682.1	14,714.4	39,455.8
32,062.6	80,790.7	4,857.6	324.8	1,735.2	728.2	114.4	88,550.7	120,613.3
151,553.9	147,174.4	46,889.2	-390.5	7,722.8	34,338.0	54,227.2	289,960.4	441,514.4
17,794.9	6,004.1	165.7	21.0	-26,638.0	2,649.5	2.8	-17,794.9	0
509,017.8	---	---	---	---	---	---	---	---
590,388.9	---	---	---	---	---	---	---	---
1,159,405.7	375,540.3	80,509.8	5,329.0	5,812.0	64,115.4	59,082.1	590,388.6	590,388.7



ra' Value)

18	19	20	21	22	23	24	25	26	27	28	Total Intermediate Inputs	Personal Consumption
									224.4		5,587.9	13
							2.0		363.7		2,224.5	1,46
	53.3		161.1	57.0	117.1	49.1			623.4		16,679.4	11
		.2	27.1			1,339.2			559.9		2,227.8	
174.6						1.7	80.6		1,490.8		12,335.6	
		1,124.4							108.3		1,236.7	
116.9	3.6					.1	2.2		216.3		1,045.5	91
21.2	109.1		1.7			35.0	4.6		298.0		1,599.9	1,54
	58.1						.7		189.9		1,727.8	1
					116.7	170.1			374.5		727.9	38
.6	6.1			237.5		96.2	44.0	96.0	764.9		4,105.7	13,72
33.4	18.3					6.2	19.5	162.5	388.6		3,741.6	8,18
						8.7	14.5	63.8	152.6		1,380.0	5,37
125.7	125.3					244.4	4.1	73.0	183.2		6,449.6	1,88
108.7	86.3	1.2	.3	1.1	.1	67.1	1.3	3.8	29.1		2,267.2	85
301.7	75.0					436.4	2.0	25.9	83.3		3,308.9	66
.9	91.9		21.4	2.7		11.6	11.8	165.2	205.2		924.0	7,53
6.5	156.2					39.4	10.2	55.5	834.2		2,050.8	7,77
860.9	16.1					18.3	24.4	86.4	113.9		857.3	3,93
47.9	195.2				44.3							
		1,769.1			.1	.1		4.1	182.2		1,955.7	4,84
3.2	2.6		5,922.4	170.6	65.5	2,258.8	31.7	167.0	488.1		9,350.1	16,18
.3	.2		60.8	893.8		145.5	.1	24.7	219.9		1,357.0	3,03
5.4	283.8	1.8	118.6	2.7	1,176.5	15,524.1	30.9	15.1	3,659.0		21,011.7	601
1,274.2	501.0	329.1	8,803.2	767.9	1,806.0	155,245.1	3,058.7	5,692.2	53,074.1		238,711.7	53,30
220.4	153.8	31.0	207.9	49.0	599.8	7,543.9	3,408.6	906.8	8,619.8		24,741.3	8,64
247.4	210.0	65.4	983.8	146.8	376.5	10,132.8	1,044.5	2,158.9	12,841.2		32,062.6	80,72
1,026.6	384.8	424.4	1,184.9	254.5	4,066.5	26,760.1	6,011.2	22,439.0	79,111.9		151,553.9	147,17
16.8	1,028.5	73.6	537.0	59.0	2,307.4	7,774.4	1,775.6	25.6	2,176.7		17,794.9	6,00
5,595.1	3,560.2	3,820.4	18,056.3	2,642.7	10,676.3	227,910.3	15,583.3	32,165.4	167,584.6		569,017.8	
3,354.3	1,377.1	3,609.8	8,179.2	1,755.2	11,648.5	137,530.7	23,872.8	88,447.9	273,929.5		590,388.9	
9,549.4	4,937.2	7,430.2	26,235.3	4,398.0	22,324.8	365,441.0	39,455.8	120,613.3	441,514.4		1,159,406.7	375,54



Table 1.--1963 Input-Output Transactions Data for Detailed Industries (Millions of dollars at Producers' Value)

7	8	9	10	11	12	13	14	15	16	17	18	19	20
11.9	48.5	36.2	11.7	---	4,899.3	---	---	---	---	---	---	---	---
13.4	13.2	13.1	4.8	1,733.9	10.2	---	---	---	---	---	---	---	---
19.5	116.6	236.1	12.5	9,617.9	---	---	---	---	---	---	---	53.3	---
---	---	---	---	---	---	---	---	---	281.7	---	---	---	---
---	---	---	---	4.8	---	---	2,322.6	---	---	---	174.6	---	---
---	---	---	---	---	---	---	---	---	---	---	---	---	1,124.1
4.4	---	---	---	---	33.9	575.9	---	---	1.5	88.8	118.9	3.6	---
---	116.6	---	---	---	---	478.5	9.4	470.9	19.7	---	21.2	109.1	---
---	---	120.8	---	---	---	---	---	---	1,274.4	45.6	---	58.1	---
17.7	.1	---	48.7	---	---	---	---	---	---	---	---	---	---
---	---	---	---	2,114.5	22.2	243.8	46.1	---	306.6	125.2	.6	6.1	---
---	---	---	---	16.6	2,879.7	24.7	43.4	---	.1	148.8	33.4	18.3	---
---	---	---	---	59.9	2.1	698.1	57.1	---	39.6	30.5	125.7	125.3	---
---	---	---	---	15.1	17.0	85.2	1,350.2	1.8	52.7	1,185.1	108.7	66.3	1.2
---	---	---	---	---	101.7	185.4	101.7	910.2	---	439.0	301.7	75.0	---
---	---	---	---	26.9	---	153.5	753.5	---	1,061.0	192.0	.9	91.9	---
---	---	---	---	.3	25.8	59.1	15.1	---	7.8	259.5	6.5	156.2	---
---	---	---	---	.2	32.1	66.0	66.0	---	.2	58.1	860.9	16.1	---
---	2.3	---	---	8.9	10.1	70.3	74.3	---	10.8	149.9	47.9	195.2	---
---	---	---	---	---	---	---	---	---	---	---	---	---	1,769.1
4.0	27.0	1.3	2.7	20.8	8.0	5.3	97.6	.8	2.4	7.0	3.2	2.6	---
---	---	---	---	.5	.8	.3	.4	.2	.3	.2	.3	.2	---
6.7	12.6	4.8	2.6	6.8	6.3	5.2	18.2	6.2	21.7	1.8	5.4	283.8	1.8
200.1	287.5	214.2	64.5	667.0	847.5	1,368.0	709.5	79.4	254.7	785.5	1,274.2	501.0	329.1
26.1	29.7	16.8	12.9	600.1	85.8	298.5	539.8	141.9	207.1	212.6	220.4	153.8	31.0
78.9	99.4	55.3	40.0	376.4	282.4	351.0	553.5	114.7	131.0	330.6	247.4	210.0	65.4
243.2	385.3	410.4	89.4	452.8	697.6	524.9	502.8	82.0	192.1	694.4	1,026.6	384.8	424.4
92.3	193.5	.9	10.0	96.1	45.7	60.7	29.6	805.7	170.8	201.3	16.8	1,028.5	73.6
718.0	1,332.1	1,110.0	307.7	15,820.5	9,990.9	5,275.3	7,292.3	2,614.0	4,037.4	4,955.8	4,595.1	3,560.2	3,820.4
1,361.0	1,953.3	1,180.7	830.4	2,705.2	2,404.8	1,761.7	1,572.9	636.0	458.6	3,622.6	5,354.3	1,377.1	3,609.8
2,099.1	3,285.4	2,290.7	1,138.0	18,525.7	12,403.8	7,037.0	8,865.2	3,250.0	4,495.8	8,578.3	9,519.4	4,937.2	7,430.2





Tab)

	1	2	3	4	5	6	7	8
1. Dairy farm products	---	---	89.7	27.7	215.1	33.3	11.9	48.
2. Poultry & eggs	---	---	---	10.9	53.2	6.2	13.4	13.
3. Meat animals & misc. livestock prod.	---	---	4,660.1	136.7	720.7	78.4	19.5	115.
4. Cotton	---	---	---	19.6	---	---	---	---
5. Food, feed grains & grass seeds	2,266.3	607.5	4,950.2	---	436.6	---	---	---
6. Tobacco	---	---	---	---	---	4.1	---	---
7. Fruits & tree nuts	---	---	---	---	---	---	4.4	---
8. Veg., sugar & misc. crops	.2	---	34.8	---	---	---	---	116.
9. Oil-bearing crops	---	---	38.4	---	---	---	---	---
10. Forest, greenhouse & nursery prod.	---	---	---	---	---	---	17.7	.
11. Meat products	---	---	---	---	---	---	---	---
12. Dairy plants	---	---	---	---	---	---	---	---
13. Canning, freezing & dehydrating except seafood	---	---	---	---	---	---	---	---
14. Feed, flour, milling	594.8	1,440.2	1,000.3	---	---	---	---	---
15. Sugar	30.6	---	20.4	---	---	---	---	---
16. Fats & oil mills	57.9	140.3	257.2	---	---	---	---	---
17. Confectionaries, bakeries & macaroni	---	---	---	---	---	---	---	---
18. Beverages & flavorings	5.6	3.2	3.5	---	---	---	---	---
19. Miscellaneous	---	---	---	---	---	---	---	2.
20. Tobacco manufactures	---	---	---	---	---	---	---	---
21. Textiles, apparel & fabrics	10.8	1.5	14.3	2.2	33.9	.9	4.0	27.0
22. Leather products	---	---	7.1	---	---	---	---	---
23. Other resource industries	.1	6.4	.7	10.9	78.8	4.0	6.7	12.6
24. Other manufacturing	130.3	98.0	213.7	314.9	1,761.6	135.8	200.1	287.9
25. Transportation & warehousing	219.0	75.5	311.7	28.7	181.2	12.8	26.1	29.7
26. Wholesale & retail trade	171.6	121.4	505.9	84.8	448.2	36.0	78.9	99.4
27. Other non-commodity	441.4	507.4	707.4	568.4	2,763.8	228.4	243.2	385.3
28. Import	---	1.6	174.1	53.8	44.6	31.3	92.3	193.5
Intermediate Inputs	3,928.7	3,073.2	12,990.1	1,658.6	6,737.8	572.5	718.0	1,332.1
Value Added	1,848.8	635.4	4,206.3	1,434.6	7,131.6	918.0	1,381.0	1,953.2
Total Inputs	5,777.4	3,708.6	17,196.4	3,093.2	13,869.3	1,490.5	2,099.1	3,285.4



23	24	25	26	27	28	Inter- mediate Inputs	Final Demand	Total Output
---	---	---	---	.03884	---	.96718	.03280	.99998
---	---	.00054	---	.09807	---	.59984	.40018	1.00002
.00681	.00285	---	---	.03625	---	.96983	.03017	1.00000
---	.43295	---	---	.18101	---	.72019	.27981	1.00000
---	.00012	.00581	---	.10749	---	.88942	.11059	1.00001
---	---	---	---	.07266	---	.82979	.17028	1.00007
---	.00005	.00105	---	.10304	---	.49812	.50193	1.00005
---	.01065	.00140	---	.09070	---	.48690	.51303	.99993
---	---	.00031	---	.08290	---	.75431	.24573	1.00004
.10255	.14947	---	---	.32909	---	.63954	.36046	1.00000
---	.00519	.00238	.00518	.04129	---	.22163	.77838	1.00001
---	.00050	.00157	.01310	.03133	---	.30167	.69836	1.00003
---	.00124	.00206	.00907	.02169	---	.19581	.80388	.99969
.00001	.02757	.00046	.00823	.02123	---	.72751	.27248	.99999
---	.02065	.00040	.00117	.00895	---	.69755	.30243	.99998
---	.09751	.00044	.00576	.01853	---	.73597	.26402	.99999
---	.00135	.00138	.01926	.02392	---	.10773	.89229	1.00002
---	.00396	.00103	.00558	.08384	---	.20616	.79387	1.00003
.00897	.00371	.00494	.01750	.02307	---	.17359	.82636	.99995
.00001	.00001	---	.00055	.02452	---	.26319	.73679	.99998
.00250	.08610	.00121	.00637	.01860	---	.35639	.64361	1.00000
---	.03308	.00002	.00562	.05000	---	.30812	.69147	.99959
.05270	.69537	.00138	.00068	.16390	---	.94117	.05880	.99997
.00494	.42482	.00837	.01558	.14523	---	.65322	.34678	1.00000
.01520	.19120	.08639	.02298	.21847	---	.62707	.37293	1.00000
.00312	.08401	.00866	.01790	.10647	---	.26584	.73417	1.00001
.00921	.06061	.01361	.05082	.17920	---	.34328	.65674	1.00002
.12967	.43689	.09978	.00144	.12232	---	.99999	.99999	0



Output 1963 Distribution of Sales

14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	.00310	---	.01053	.00331	.00681	.00285
---	---	.09107	---	---	---	.00006	.00876	---	---	.43295
16746	---	---	---	.01259	---	---	---	---	---	.00012
---	---	---	---	---	---	.75438	---	---	---	---
---	---	.00071	.04230	.05664	.00172	---	---	---	---	.00005
00286	.14333	.00600	---	.00645	.03321	---	.00052	---	---	.01065
---	---	.55634	.01991	---	.02536	---	---	---	---	---
---	---	---	---	---	---	---	---	---	.10255	.14947
00260	---	.01655	.00676	.00003	.00033	---	---	.01282	---	.00519
00350	---	.00001	.01200	.00269	.00148	---	---	---	---	.00050
00811	---	.00563	.00433	.01786	.01781	---	---	---	---	.00124
15230	.00020	.00594	.13368	.01226	.00973	.00014	.00003	.00012	.00001	.02757
03129	.28006	---	.13508	.09283	.02308	---	---	---	---	.02065
16760	---	.23600	.04271	.00020	.02044	---	.00476	.00060	---	.09751
00176	---	.00091	.03025	.00076	.01821	---	---	---	---	.00135
00663	---	.00002	.00584	.08653	.00162	---	---	---	---	.00396
01505	---	.00219	.03036	.00970	.03954	---	---	---	.00897	.00371
---	---	---	---	---	---	.23810	---	---	.00001	.00001
00372	.00003	.00009	.00027	.00012	.00010	---	.22574	.00650	.00250	.08610
00009	.00005	.00007	.00005	.00007	.00005	---	.01382	.20323	---	.03308
00062	.00028	.00097	.00008	.00024	.01271	.00008	.00531	.00012	.05270	.69537
00194	.00022	.00070	.00215	.00349	.00137	.00090	.02409	.00210	.00494	.42482
01368	.00360	.00525	.00539	.00559	.00390	.00079	.00527	.00124	.01520	.19120
00459	.00095	.00109	.00274	.00205	.00174	.00054	.00820	.00122	.00312	.08401
00114	.00019	.00044	.00157	.00233	.00087	.00096	.00268	.00058	.00921	.06061
00166	.04528	.00960	.01131	.00094	.05780	.00414	.03018	.00332	.12967	.43689



Table 2.--Input Output 1963 Distribution of

6	7	8	9	10	11	12	13	14	15	16
.00576	.00206	.00839	.00627	.00203	----	.84628	---	---	---	---
.00167	.00361	.00356	.00353	.00129	.46753	.00275	---	---	---	---
.00456	.00113	.00678	.01373	.00073	.55923	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	.09107
---	---	---	---	---	.00035	---	---	.16746	---	---
.00275	---	---	---	---	---	---	---	---	---	---
---	.00210	---	---	---	---	.01615	.27436	---	---	.00071
---	---	.03549	---	---	---	---	.14564	.00286	.14333	.00600
---	---	.05273	---	---	---	---	---	---	---	.55634
---	.01555	.00009	---	.04279	---	---	---	---	---	---
---	---	---	---	---	.11414	.00120	.01316	.00260	---	.01655
---	---	---	---	---	.00134	.23216	.00199	.00350	---	.00001
---	---	---	---	---	.00851	.00030	.09920	.00811	---	.00563
---	---	---	---	---	.00170	.00192	.00961	.15230	.00020	.00594
---	---	---	---	---	---	.03129	.05705	.03129	.28006	---
---	---	---	---	---	.00598	---	.03414	.16760	---	.23600
---	---	---	---	---	.00003	.00301	.00689	.00176	---	.00091
---	---	---	---	---	.00002	.00323	.00663	.00663	---	.00002
---	---	.00047	---	---	.00180	.00205	.01424	.01505	---	.00219
---	---	---	---	---	---	---	---	---	---	---
.00003	.00015	.00103	.00005	.00010	.00079	.00030	.00020	.00372	.00003	.00009
---	---	---	---	---	.00011	.00018	.00007	.00009	.00005	.00007
.00018	.00030	.00056	.00022	.00012	.00030	.00020	.00023	.00082	.00028	.00097
.00037	.00055	.00079	.00059	.00018	.00163	.00232	.00380	.00194	.00022	.00070
.00032	.00066	.00075	.00043	.00033	.01521	.00217	.00757	.01368	.00360	.00525
.00030	.00065	.00082	.00046	.00033	.00312	.00234	.00291	.00459	.00095	.00109
.00052	.00055	.00087	.00093	.00020	.00163	.00158	.00119	.00114	.00019	.00044
.00176	.00519	.01037	.00005	.00101	.00540	.00257	.00341	.00166	.04528	.00960





	1	2	3	4	5	6
1. Dairy farm products	---	---	.01553	.00479	.03723	.0057
2. Poultry & eggs	---	---	---	.00294	.01435	.0010
3. Meat animals & misc. lvstk. prod.	---	---	.27096	.00795	.04191	.0045
4. Cotton	---	---	---	.00634	---	---
5. Food, feed grains & grass seeds	.16340	.04380	.35692	---	.03148	---
6. Tobacco	---	---	---	---	---	.0027
7. Fruit & tree nuts	---	---	---	---	---	---
8. Veg., sugar & misc. crops.	.00006	---	.01059	---	---	---
9. Oil-bearing crops	---	---	.01676	---	---	---
10. Forest, greenhouse & nursery prod.	---	---	---	---	---	---
11. Meat products	---	---	---	---	---	---
12. Dairy plants	---	---	---	---	---	---
13. Canning, freezing & dehydrating, except seafood	---	---	---	---	---	---
14. Feed, flour, milling	.06709	.16246	.11283	---	---	---
15. Sugar	.00942	---	.00628	---	---	---
16. Fats & oil mills	.01288	.03121	.05721	---	---	---
17. Confectionaries, bakeries & macaroni	---	---	---	---	---	---
18. Beverages & flavorings	.00056	.00032	.00035	---	---	---
19. Miscellaneous	---	---	---	---	---	---
20. Tobacco manufactures	---	---	---	---	---	---
21. Textiles, apparel & fabrics	.00041	.00006	.00055	.00008	.00129	.0000
22. Leather products	---	---	.00161	---	---	---
23. Other resource industries	---	.00029	.00003	.00049	.00353	.00018
24. Other manufacturing	.00036	.00027	.00058	.00086	.00482	.00037
25. Transportation & warehousing	.00555	.00191	.00790	.00073	.00459	.00037
26. Wholesale & retail trade	.00142	.00159	.00420	.00070	.00372	.0003
27. Other non-commodity	.00100	.00115	.00160	.00219	.00626	.0005
28. Imports	---	.00009	.00978	.00302	.00251	.0017
Intermediate Inputs	---	---	---	---	---	---
Value added	---	---	---	---	---	---
Total Inputs	---	---	---	---	---	---



23	24	25	26	27	28	Total :Intermediate: :Inputs:	Final Demand
---	---	---	---	.00051	---	.00482	.00032
---	---	.00005	---	.00082	---	.00192	.00251
.00525	.00013	---	---	.00141	---	.01439	.00088
---	.00366	---	---	.00127	---	.00192	.00147
---	---	.00204	---	.00338	---	.01064	.00260
---	---	---	---	.00025	---	.00107	.00043
---	---	.00006	---	.00049	---	.00090	.00178
---	.00010	.00012	---	.00067	---	.00138	.00285
---	---	.00002	---	.00043	---	.00149	.00095
.00523	.00047	---	---	.00085	---	.00063	.00069
---	.00026	.00112	.00080	.00173	---	.00354	.02442
---	.00002	.00049	.00135	.00088	---	.00323	.01467
---	.00002	.00037	.00053	.00035	---	.00119	.00958
---	.00067	.00010	.00061	.00043	---	.00556	.00409
---	.00018	.00003	.00003	.00007	---	.00196	.00166
---	.00120	.00005	.00021	.00019	---	.00285	.00201
---	.00003	.00030	.00137	.00046	---	.00080	.01296
---	.00011	.00026	.00046	.00189	---	.00177	.01338
.00198	.00005	.00062	.00072	.00026	---	.00074	.00691
---	---	---	.00003	.00041	---	.00169	.00921
.00293	.00618	.00080	.00138	.00111	---	.00806	.02860
---	.00040	---	.00020	.00050	---	.00117	.00515
.05270	.04248	.00078	.00013	.00829	---	.01812	.00222
.08090	.42482	.07752	.04719	.12021	---	.20589	.21465
.02687	.02064	.08639	.00752	.01952	---	.02134	.02492
.01686	.02773	.02647	.01790	.02908	---	.02610	.14999
.18215	.07323	.15235	.18604	.17918	---	.13072	.49113
.10336	.02127	.04500	.00021	.00493	---	.01535	.03014
.47823	.62365	.39494	.26668	.37957	---	.48924	
.52177	.37634	.60505	.73332	.62043	---	.50922	
.99900	.99999	.99999	1.00000	1.00000	---	.99846	.99995



Input 1963 Distribution of Purchases

15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---
---	---	---	---	.01080	---	.00690	.01296	.00525	.00013
---	.06266	---	---	---	.00003	.00103	---	---	.00366
---	---	---	.01755	---	---	---	---	---	---
---	---	---	---	---	.15133	---	---	---	---
---	.00033	.01035	.01195	.00073	---	---	---	---	---
.14489	.00438	---	.00213	.02210	---	.00006	---	---	.00010
---	.28346	.00532	---	.01177	---	---	---	---	---
---	---	---	---	---	---	---	---	.00523	.00047
---	.06820	.01459	.00006	.00124	---	---	.05400	---	.00026
---	.00002	.01735	.00336	.00371	---	---	---	---	.00002
---	.00881	.00356	.01263	.02538	---	---	---	---	.00002
.00055	.01172	.13815	.01093	.01748	.00016	.00001	.00025	---	.00067
.28006	---	.05118	.03032	.01519	---	---	---	---	.00018
---	.23600	.02238	.00009	.01861	---	.00082	.00061	---	.00120
---	.00173	.03025	.00065	.03164	---	---	---	---	.00003
---	.00004	.00677	.08653	.00326	---	---	---	---	.00011
---	.00240	.01747	.00481	.03954	---	---	---	.00198	.00005
---	---	---	---	---	.23810	---	---	---	---
.00025	.00053	.00082	.00032	.00053	---	.22574	.03879	.00293	.00618
.00006	.00007	.00002	.00003	.00004	---	.00232	.20323	---	.00040
.00191	.00483	.00021	.00054	.05748	.00024	.00452	.00061	.05270	.04248
.02443	.05665	.09157	.12807	.10147	.04429	.33555	.17460	.08090	.42482
.04366	.04607	.02478	.02215	.03115	.00417	.00792	.01114	.02687	.02064
.03529	.02914	.03854	.02487	.04253	.00880	.03769	.03338	.01686	.02773
.02523	.04273	.08095	.10318	.07794	.05712	.04516	.05787	.18215	.07323
.24791	.03799	.02347	.00169	.20832	.00991	.02047	.01342	.10336	.02127
.80424	.89776	.57773	.46186	.72091	.51415	.68819	.60086	.47823	.62365
.19569	.10201	.42230	.53815	.27892	.48583	.31176	.39909	.52177	.37634
.99993	.99977	1.00003	1.00001	.99983	.99998	.99995	.99995	.99900	.99999



Table 3.-Input-Output 1963 Distribution of

5	6	7	8	9	10	11	12	13	14	15	16	17
551	.02234	.00567	.01476	.01580	.01028	---	.39418	---	---	---	---	---
384	.00416	.00638	.00402	.00572	.00422	.09359	.00082	---	---	---	---	---
196	.05260	.00929	.03549	.10307	.01098	.51917	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	.06266	---
148	---	---	---	---	---	.00026	---	---	.26199	---	---	---
---	.00275	---	---	---	---	---	---	---	---	---	---	---
---	---	.00210	---	---	---	---	.00273	.08184	---	---	.00033	.010
---	---	---	.03549	---	---	---	---	.06800	.00106	.14489	.00438	---
---	---	---	---	.05273	---	---	---	---	---	---	.28346	.005
---	---	.00843	.00003	---	.04279	---	---	---	---	---	---	---
---	---	---	---	---	---	.11414	.00179	.03465	.00543	---	.06820	.014
---	---	---	---	---	---	.00090	.23216	.00351	.00490	---	.00002	.017
---	---	---	---	---	---	.00323	.00017	.09920	.00644	---	.00881	.003
---	---	---	---	---	---	.00082	.00137	.01211	.15230	.00055	.01172	.138
---	---	---	---	---	---	---	.00820	.02635	.01147	.28006	---	.051
---	---	---	---	---	---	.00145	---	.02181	.08500	---	.23600	.022
---	---	---	---	---	---	.00002	.00208	.00840	.00170	---	.00173	.030
---	---	---	---	---	---	.00001	.00259	.00938	.00744	---	.00004	.006
---	---	---	.00070	---	---	.00048	.00081	.00999	.00838	---	.00240	.0174
---	---	---	---	---	---	---	---	---	---	---	---	---
244	.00060	.00191	.00822	.00057	.00237	.00112	.00064	.00075	.01101	.00025	.00053	.0006
---	---	---	---	---	---	.00003	.00006	.00004	.00005	.00006	.00007	.0000
668	.00268	.00319	.00384	.00210	.00228	.00037	.00051	.00074	.00205	.00191	.00483	.0002
701	.09178	.09533	.08751	.09351	.05668	.03600	.06833	.19724	.08003	.02443	.05665	.0915
307	.00859	.01243	.00904	.00733	.01134	.03239	.00692	.04242	.06089	.04366	.04607	.0247
32	.02415	.03759	.03026	.02414	.03515	.02032	.02277	.04988	.06244	.03529	.02914	.0385
27	.15324	.11586	.11728	.17916	.07856	.02444	.05624	.07459	.05672	.02523	.04273	.0807
22	.02100	.04397	.05890	.00039	.01582	.00519	.00368	.00863	.00334	.24791	.03799	.023
79	.38389	.34215	.40554	.48452	.27047	.85393	.80605	.74953	.82264	.80424	.89776	.577
20	.61590	.65790	.59454	.51543	.72970	.14602	.19388	.25035	.17742	.19569	.10201	.422
99	.99979	1.00005	1.00008	.99995	1.00017	.99995	.99993	.99988	1.00006	.99993	.99977	1.000





	1	2	3	4	5	6
1. Dairy farm products	---	---	.00522	.00896	.01551	.02231
2. Poultry & eggs	---	---	---	.00352	.00384	.00417
3. Meat animals & misc. livestock prod.	---	---	.27096	.04419	.05196	.05260
4. Cotton	---	---	---	.00634	---	---
5. Food, feed grains & grass seeds	.39227	.16381	.28783	---	.03148	---
6. Tobacco	---	---	---	---	---	.00275
7. Fruit & tree nuts	---	---	---	---	---	---
8. Veg., sugar & misc. crops	.00003	---	.00202	---	---	---
9. Oil-bearing crops	---	---	.00223	---	---	---
10. Forest, greenhouse & nursery	---	---	---	---	---	---
11. Meat products	---	---	---	---	---	---
12. Dairy plants	---	---	---	---	---	---
13. Canning, freezing & dehydrating, except seafood	---	---	---	---	---	---
14. Feed, flour, milling	.10295	.38834	.05816	---	---	---
15. Sugar	.00530	---	.00119	---	---	---
16. Fats & oil mills	.01002	.03783	.01496	---	---	---
17. Confectionaries, bakeries & macaroni	---	---	---	---	---	---
18. Beverages & flavorings	.00097	.00086	.00020	---	---	---
19. Miscellaneous	---	---	---	---	---	---
20. Tobacco manufactures	---	---	---	---	---	---
21. Textiles, apparel & fabrics	.00187	.00041	.00083	.00071	.00244	.00060
22. Leather products	---	---	.00041	---	---	---
23. Other resource industries	.00002	.00173	.00004	.00352	.00568	.00268
24. Other manufacturing	.02255	.02643	.01243	.10180	.12701	.09178
25. Transportation & warehousing	.03791	.02036	.01812	.00928	.01307	.00859
26. Wholesale & retail trade	.02970	.05161	.02947	.02742	.03232	.02415
27. Other non-commodity	.07640	.13682	.04113	.31307	.19927	.15324
28. Imports	---	.00043	.01012	.01739	.00322	.02100
Total Intermediate Inputs	.67999	.82863	.75532	.53620	.48579	.38389
Value added	.32001	.17133	.24469	.46379	.51420	.61590
Total Inputs	1.00000	.99996	1.00001	.99999	.99999	.99979



:	:	:	:	:	:	:
:	23	:	24	:	25	:
:	:	:	:	:	26	:
:	:	:	:	:	27	:
:	:	:	:	:	28	:

26	.00053	.00045	.00067	.00107	.00152	0
56	.00036	.00036	.00048	.00039	.00138	0
44	.00953	.00335	.00261	.00216	.00577	0
44	.00124	.00719	.00113	.00093	.00277	0
54	.00454	.00267	.00460	.00257	.00776	0
66	.00009	.00007	.00003	.00009	.00042	0
15	.00017	.00014	.00026	.00023	.00073	0
62	.00036	.00049	.00045	.00034	.00107	0
85	.00044	.00110	.00037	.00043	.00099	0
54	.00620	.00154	.00039	.00035	.00141	0

55	.00081	.00141	.00208	.00167	.00287	0
54	.00044	.00046	.00110	.00218	.00163	0

56	.00025	.00026	.00064	.00079	.00064	0
83	.00135	.00216	.00107	.00178	.00232	0
63	.00024	.00060	.00028	.00038	.00048	0
23	.00088	.00331	.00074	.00095	.00130	0
26	.00029	.00029	.00056	.00164	.00073	0
51	.00066	.00072	.00068	.00112	.00274	0
26	.00237	.00044	.00088	.00094	.00053	0

10	.00015	.00012	.00013	.00018	.00069	0
81	.00643	.01542	.00334	.00350	.00447	0
69	.00032	.00111	.00028	.00050	.00097	0

8	1.06838	.08362	.01251	.00907	.02414	0
51	.22411	1.81881	.20914	.14651	.28606	0
83	.04343	.04937	1.10564	.01811	.03570	0
44	.03535	.06184	.04379	1.03139	.04857	0
81	.27705	.20969	.23941	.25477	1.27242	0
8	.11953	.05155	.05719	.00690	.01717	1.00000

8	1.80550	2.31854	1.69070	1.49094	1.72725	1.00000
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per dollar of Delivery to Final Demand

13	14	15	16	17	18	19	20	21	22	23	24	25
.00518	.00968	.00345	.00936	.01174	.00298	.00402	.00487	.00051	.00126	.00053	.00045	.000
.00577	.00365	.00102	.01273	.00287	.00060	.00115	.00105	.00033	.00756	.00036	.00036	.000
.04392	.04588	.01150	.13999	.02596	.00493	.02753	.01592	.01503	.08144	.00953	.00335	.002
.00458	.01029	.00073	.08472	.00465	.00168	.00337	.00097	.00481	.00244	.00124	.00719	.001
.02428	.34135	.00635	.05861	.06128	.02782	.01942	.00322	.00605	.02954	.00454	.00267	.004
.00008	.00010	.00004	.00010	.00007	.00007	.00007	.19922	.00006	.00006	.00009	.00007	.000
.09158	.00125	.00009	.00178	.01160	.01456	.00380	.00010	.00012	.00015	.00017	.00014	.000
.08566	.00640	.20885	.00793	.01334	.01102	.03044	.00022	.00043	.00052	.00036	.00049	.000
.01162	.04078	.00037	.39488	.02172	.00118	.02288	.00043	.00112	.00185	.00044	.00110	.000
.00143	.00059	.00024	.00059	.00054	.00057	.00079	.00029	.00081	.00054	.00620	.00154	.000
.04757	.01913	.00055	.10319	.02310	.00172	.00653	.00053	.00127	.07765	.00081	.00141	.002
.00616	.00845	.00034	.00110	.02509	.00540	.00660	.00027	.00043	.00054	.00044	.00046	.001
.11161	.01061	.00017	.01388	.00681	.01583	.03030	.00013	.00022	.00056	.00025	.00026	.000
.02550	1.18917	.00287	.03617	.17470	.01616	.03142	.00271	.00217	.01033	.00135	.00216	.001
.04296	.02062	1.38919	.00187	.07781	.04739	.02654	.00021	.00035	.00053	.00024	.00060	.000
.03740	.13495	.00094	1.31783	.05179	.00332	.03198	.00107	.00334	.00523	.00088	.00331	.000
.01046	.00316	.00020	.00298	1.03264	.00131	.03464	.00014	.00026	.00026	.00029	.00043	1.000
.01242	.01064	.00036	.00131	.00985	1.09558	.00508	.00041	.00056	.00061	.00066	.00072	.000
.01250	.01127	.00035	.00415	.02081	.00602	1.04285	.00014	.00031	.00036	.00237	.00044	.000
.00013	.00016	.00007	.00016	.00012	.00011	.00011	1.31260	.00010	.00010	.00015	.00012	.000
.00773	.02222	.00429	.00588	.00716	.00411	.00489	.00202	1.29902	.06781	.00043	.01542	.003
.00055	.00058	.00029	.00059	.00039	.00037	.00038	.00021	.00434	1.25569	.00032	.00111	.000
.02824	.02589	.01109	.02641	.01827	.01792	.07902	.01035	.04473	.02508	1.06838	.03362	.012
.51650	.37818	.13870	.33439	.29959	.32581	.29560	.17719	.81979	.49051	.22411	1.81881	.209
.08233	.11238	.07587	.09732	.06333	.04492	.05882	.01683	.03669	.03833	.04343	.04937	1.105
.09705	.12046	.06727	.08563	.08047	.05108	.07323	.02840	.03162	.07254	.03535	.06184	.042
.24090	.28427	.12038	.29416	.21432	.20822	.20077	.16066	.18528	.18281	.27705	.20959	.239
.05358	.03674	.36519	.07186	.06489	.02863	.24688	.02400	.05190	.03578	.11953	.05155	.057
6.0769	2.84903	2.41076	3.10957	2.32491	1.93931	2.28911	1.96916	2.56165	2.39008	1.80550	2.31854	1.690





Table 4.--Direct and Indirect Production Requirements per dollar of

	3	4	5	6	7	8	9	10	11	12	13	14
33	.01534	.01036	.01742	.02373	.00628	.01630	.01890	.01124	.01045	.01789	.00518	.00968
87	.00250	.00417	.00450	.00463	.00670	.00453	.00668	.00463	.10755	.00277	.00577	.00365
00	1.41061	.06549	.07825	.07670	.01489	.05392	.15586	.01759	.33157	.02250	.04392	.04588
15	.00368	1.00825	.00186	.00142	.00118	.00129	.00177	.00083	.00362	.00254	.00458	.01029
04	.45417	.02826	1.06753	.03701	.01025	.02637	.06074	.01244	.30066	.23679	.02428	.34135
12	.00008	.00015	.00011	1.00284	.00006	.00007	.00010	.00005	.00008	.00009	.00008	.00010
72	.00028	.00027	.00020	.00016	1.00222	.00013	.00020	.00009	.00063	.00391	.09158	.00125
08	.00423	.00062	.00058	.00051	.00027	1.03722	.00078	.00022	.00323	.00366	.08566	.00640
21	.01534	.00132	.00146	.00141	.00064	.00110	1.05798	.00058	.01313	.00497	.01162	.04078
62	.00043	.00066	.00058	.00042	.00919	.00042	.00050	1.04496	.00045	.00054	.00143	.00059
10	.00451	.00140	.00122	.00101	.00071	.00084	.00137	.00056	1.13339	.00518	.04757	.01913
80	.00116	.00071	.00058	.00046	.00038	.00041	.00059	.00030	.00259	1.30341	.00616	.00845
86	.00136	.00035	.00032	.00027	.00019	.00025	.00037	.00016	.00549	.00125	1.11161	.01061
34	.10088	.00830	.01014	.01072	.00524	.00819	.01662	.00498	.10987	.06918	.02550	1.18917
33	.00434	.00054	.00062	.00063	.00028	.00050	.00085	.00029	.00370	.02047	.04296	.02052
21	.03972	.00318	.00376	.00371	.00173	.00288	.00603	.00158	.03686	.01587	.03740	.13495
59	.00056	.00035	.00030	.00023	.00020	.00024	.00029	.00016	.00068	.00330	.01046	.00316
74	.00178	.00111	.00088	.00071	.00052	.00059	.00090	.00040	.00189	.00552	.01242	.01064
75	.00123	.00034	.00033	.00028	.00021	.00100	.00037	.00017	.00194	.00208	.01250	.01127
21	.00014	.00024	.00018	.00013	.00010	.00011	.00017	.00008	.00014	.00015	.00013	.00016
81	.00702	.00450	.00697	.00363	.00490	.01362	.00426	.00490	.00803	.00744	.00773	.02222
52	.00105	.00049	.00044	.00034	.00027	.00032	.00043	.00020	.00082	.00049	.00055	.00058
10	.01592	.02130	.02400	.01595	.01527	.01656	.01770	.01054	.01724	.01955	.02824	.02589
94	.22876	.29736	.32595	.23672	.22417	.22797	.27091	.14826	.26447	.32341	.51650	.37818
69	.05641	.03077	.03421	.02508	.02517	.02381	.02861	.02160	.08636	.05673	.08233	.11238
83	.08258	.05547	.05963	.04519	.05360	.04937	.05301	.04861	.09130	.08040	.09705	.12046
75	.25174	.44779	.32256	.24498	.18906	.20189	.30471	.13768	.24761	.26990	.24090	.28427
76	.02978	.03095	.01744	.03154	.05317	.07117	.01336	.02298	.03148	.02566	.05358	.03674
97	2.73560	2.02471	1.98202	1.77041	1.62685	1.76157	2.02406	1.49608	3.31523	3.00565	2.60769	2.84903





	1	2	3	4
1. Dairy farm products	:1.00815	.00733	.01534	.0103
2. Poultry & eggs	: .00242	1.00287	.00250	.0041
3. Meat animals & misc. livestock prod.	: .03760	.03700	1.41061	.0654
4. Cotton	: .00310	.00315	.00368	1.0082
5. Food, feed grains & grass seeds	: .45547	.31104	.45417	.0282
6. Tobacco	: .00009	.00012	.00008	.0001
7. Fruit & tree nuts	: .00032	.00072	.00028	.0002
8. Veg., sugar & misc. crops	: .00223	.00308	.00423	.0006
9. Oil bearing crops	: .00886	.03121	.01534	.0013
10. Forest, greenhouse & nursery prod.	: .00046	.00062	.00043	.0006
11. Meat products	: .00387	.01210	.00451	.0014
12. Dairy plants	: .00136	.00380	.00116	.0007
13. Canning, freezing & dehydrating, except seafood	: .00148	.00486	.00136	.0003
14. Feed, flour, milling	: .12712	.46534	.10088	.0083
15. Sugar	: .00987	.00833	.00434	.0005
16. Fats & oil mills	: .02882	.10321	.03972	.0031
17. Confectionaries, bakeries & macaroni	: .00061	.00159	.00056	.0003
18. Beverages & flavorings	: .00281	.00574	.00178	.0011
19. Miscellaneous	: .00145	.00475	.00123	.0003
20. Tobacco manufactures	: .00015	.00021	.00014	.0002
21. Textiles, apparel & fabrics	: .00846	.01181	.00702	.0045
22. Leather products	: .00037	.00052	.00105	.0004
23. Other resource industries	: .01700	.02310	.01592	.0213
24. Other manufacturing	: .24789	.31294	.22876	.2973
25. Transportation & whseing	: .07877	.08269	.05641	.0307
26. Wholesale & retail trade	: .07461	.12233	.08258	.0554
27. Other non-commodity	: .27853	.37275	.25174	.4477
28. Imports	: .01826	.02576	.02978	.0309
Total Output	:2.41413	2.96397	2.73560	2.0247



UNITED STATES DEPARTMENT OF LABOR  
Manpower Administration

THE CHANGING LABOR FORCE AND ITS EFFECT ON RURAL PEOPLE

Talk by William H. Kolberg  
Associate Manpower Administrator for  
Policy, Evaluation, and Research  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C. 9:30 A.M., Thursday, February 19, 1970

It is highly significant that so much prominence is given to the question of employment in rural America at this year's National Agricultural Outlook Conference. This reflects a growing realization that the rural sector cannot be considered a separate compartment isolated from urban areas.

Much of what is great in our heritage stems from the contributions to our national life by generations of Americans "raised on the farm." But the tides of economic events have moved the manpower centers of the country away from rural areas and to the cities. These changes have forged new manpower requirements and have not left untouched the people on farms and in surrounding rural sections.

In the early days of urban growth the factory gate was open to the new arrival from the country or abroad, and those with ability and ambition were able to advance in the ranks of industrial manpower. Today industrial opportunities are not as plentiful for those without proper skills and education. It is now accepted that many urban social and economic problems have their roots in the lack of adequate preparation for modern industry by rural people unable or unwilling to stay home and not prepared to compete successfully for jobs in the city. Changes in the structure of farming, the explosive increase in agricultural productivity, and the release of farm manpower have set in motion a chain of developments involving both rural and urban areas and the people in them.

Our conference program today underscores the fact that rural people in the 1970's must be prepared for an economy that is becoming more and more integrated with that of the country as a whole and must be given services and training accorded urban residents.

Before considering some of these labor force developments and trends, let me digress very briefly to explain what is meant by manpower policy in general. The concept refers to several interrelated policies. It is impossible to convey the full meaning of this philosophy in a few words, but the essence consists of these elements:



- (1) Matching workers and jobs--an obligation to intervene in the processes whereby workers and employers are brought together to facilitate the orderly functioning of the labor market.
- (2) Assistance to unemployed and underemployed persons in acquiring skills needed to qualify for jobs and to participate to their fullest potential in economic life.
- (3) Affording some measure of protection to the work force from the hazards of unemployment, disability, old age, and discriminatory hiring practices.
- (4) And this underlies the other three, maintaining an economic environment in which orderly employment growth can take place and in which unemployment can be held to a minimum under conditions of reasonable price stability.

What manpower policy means insofar as government is concerned can be made more concrete by listing some of the major laws that implement it. Looking for early precedents, one could go back to the Morrill Act of 1862, which laid the foundation for higher education in most States, and to the Smith-Hughes Act of 1917, which established the Federal-State partnership in vocational education. Then there are the Wagner-Peyser and the Social Security laws of the 1930's. The Employment Act of 1946 established the guiding principle that the government must take appropriate measures to maintain high levels of production, employment, and income. More recently we have had the Manpower Development and Training Act, the Vocational Education Act, the Economic Opportunity Act, and the Public Works and Economic Development Act; all of these contribute to manpower policies and programs.

Viewed against this backdrop, a manpower policy for rural America requires a review of the structure and dynamics of its labor force and employment opportunities in a changing economy. In other words, the problem is to determine the needs of the population living in the countryside for education, training, and other forms of human resource development to enable them to share in the economic advance of the country as a whole.

#### Changes in National Employment Patterns

Since World War II we have witnessed the continuation of the tremendous growth of our urban centers. This growth has also precipitated significant changes in the occupational and industrial patterns of employment. The number of workers on nonfarm payrolls expanded in virtually every industry, and by 1969 totalled 70 million, a gain of 60 percent over the 1947 level. Facing the increase in wage and salary employment were the service-producing industries--trade, finance, insurance, real estate, government (particularly State and local government) transportation, and public utilities, and especially the service industry group, which includes a wide variety of personal, business, health, and educational services. In these industries alone, employment advanced more than 80 percent between 1947 and 1969.





Manufacturing employment rose almost 30 percent between 1947 and 1969, although the path of increase was not smooth. Employment growth was mainly registered in the last few years and concentrated largely in the durable goods sector, reflecting business investment and strong consumer demand as well as stepped-up defense production. During the same period employment in construction, encompassing a wide range of skilled as well as unskilled occupations, rose over 70 percent.

Of the major nonagricultural industry groups, only mining declined, and this is significant since mining employment has a particular impact on rural areas. Employment in that industry group dropped by more than one-third from almost a million in 1947 as productivity in mines increased dramatically. In recent years, employment declines have tapered off somewhat because increasing demand for mineral products has offset the effects of labor efficiency gains.

Obviously, these developments in industrial employment have affected the overall labor market of the country and created employment opportunities for many rural residents who sought off-farm jobs during this period. However, as an examination of the occupational impact of this growth shows, rural migrants as well as urban job seekers not equipped with adequate training and education were not able to share equitably in the national prosperity.

The occupational changes associated with industrial growth have generally favored white-collar and service occupations rather than blue-collar jobs, and within these categories high rather than low skilled applicants were most favored. Professional and technical workers led other major occupational groups as virtually all types of professional workers were in great demand. Employment gains were particularly large in teaching, the health professions, engineering and scientific fields, and in social and welfare work. Other white-collar workers shared in the increased employment but to a lesser degree, although clerical workers--an important source of employment for women--also expanded at a relatively sharp rate. Among blue-collar occupations, craftsmen and foremen enjoyed plentiful job opportunities, in comparison with semiskilled operatives whose employment tended to rise and fall with manufacturing growth. Nonfarm laborers showed little gain over the period--declining during the first decade and growing slowly in the second. This demonstrates the relative weakening in demand for persons with little or no skills.

In the service category, postwar employment of private household workers declined moderately, with a sharp drop in the last few years. Employment of other service workers has had a particularly rapid growth; these include women service workers in health and food service industries and men in protective occupations such as police and firemen. But, as I will discuss later, farm occupations continued to decline. The full impact of mechanization now in sight may trigger further contraction in farm employment in the not too distant future, although at some point a leveling off must be anticipated.





## Trends in the Rural Labor Market

What has happened in the rural labor market during the period since World War II? Basically it has undergone significant changes due to the convergence of three major trends. The first, as mentioned before, is the decline in agricultural employment; the second is the growing interdependence of the farm and nonfarm labor markets; and the third, which is related to the first two, is the raising of skill levels in rural occupations.

Overall labor requirements for agricultural production have been trending downward for years due to technological developments and changes in production practices. Output per man hour in agriculture has risen by the phenomenal amount of more than 250 percent between 1947 and 1969. Few industries can match this record. Employment on farms has declined more than half from about 10.4 million in 1947 to 4.6 million in 1969 according to USDA figures. Agriculture is still shrinking in importance as a source of employment; between 1960 and 1969, farm employment declined at a rate of about 275,000 a year. This has had tremendous implications in terms of insecurity and maladjustment of farm operators and farm laborers.

The technological revolution was also a major factor in the changing structure of agriculture, releasing literally thousands of small farm operators and tenants. The number of farms has dropped from almost 6 million in 1947 to less than 3 million in 1969 while the average size of farms has nearly doubled. The biggest relative decline between 1950 and 1964 has been in small farms of less than 100 acres. Of particular significance from the standpoint of manpower problems is the drop of about 375,000 in the number of Negro farm operators in the South, including some 200,000 sharecroppers. While sharecropping affords a marginal level of living at best, the displacement of such a large group of farmers and their family members, with limited occupational skills and education, has created tremendous readjustment problems that have never been fully resolved.

The decline in agricultural employment opportunities has further complicated working conditions in the farm labor market which was already beset by problems of seasonality, low wages and annual earnings, instability of tenure, and lack of coverage under basic forms of protective legislation. In 1968, according to a USDA survey, the 1,620,000 noncasual hired farm workers averaged only 135 days of farm work and 27 days of nonfarm work, earning less than \$1,600 a year, on the average, in a combination of farm and nonfarm jobs. This is, of course, far below the minimum adequate level. The Census Bureau considered an income of \$3,034 per year as the minimum threshold of poverty for a farm family of four in 1968. Many farmworkers must piece together a meager livelihood in a series of intermittent jobs, often traveling great distances in migratory streams for seasonal work. The conditions of life and work for migratory farm workers and their families are still deplorable despite local attempts to enforce housing codes and provide a minimum of health and education services.



The declining importance of agriculture as a source of employment is being offset to some extent by growth in nonfarm employment in or near rural sections. The proportion of the rural population living on farms has shrunk to less than 20 percent. It is estimated that in 1969 only 10.3 million persons were farm residents, down more than 60 percent from 25.8 million in 1947. An increasing proportion of the rural labor force is engaged in nonfarm employment. The rural population today contains millions of people who work in manufacturing, mining, recreation, education, and health activities, military installations, trade and service industries, and so forth, jobs that have little connection with agriculture. Less than one in four of the rural labor force works at farm jobs.

The increasingly nonfarm character of the rural labor force is also reflected in its changing occupational structure. Between 1950 and 1960 the proportion of rural males employed as farm operators, managers, or laborers dropped from 41 to 26 percent. At the same time, the percentage of males employed in blue-collar occupations rose from 39 to 46 percent, and those classified as white-collar workers also went up from 16 to 21 percent. Although low skill jobs are still important, the changing skill levels emphasize the need for basic changes in the rural vocational education system.

Despite expansion in typically nonfarm industries, the new job opportunities available for rural workers have not been sufficient to offset losses in agriculture, mining, forestry and other rural industries. Employment growth has not been able to accommodate both the natural increase of the labor force and workers squeezed out of agriculture. This has resulted in a surplus labor supply, widespread underemployment, and has stimulated large-scale rural-urban migration.

Unemployment among agricultural workers is significantly higher than among nonfarm workers. In 1969 when the U.S. unemployment rate averaged 3.5 percent, the rate for experienced agricultural wage and salary workers was 6.0 percent, the highest of any industry. Only the construction and textile and apparel industries had comparable unemployment records.

To some extent, income statistics are a better measure of the elusive concept of "underemployment" than unemployment. About 12.5 million nonmetropolitan residents were classified as living below the poverty level in 1968. The median cash income of farm families in 1968 was reported to be close to \$5,800 per year compared with about \$8,600 for all U.S. families, and this gap is not bridged by differences in cost of living.

The relative lack of employment opportunities in rural areas has resulted in continued outmigration. Although the rate is thought to have declined since the decade of the 50's, recent outmigration is still sizeable. One thousand counties, mostly rural, have declined in population between 1960 and 1966 as net outmigration exceeded natural population increase. <sup>1/</sup> Rural-urban migrants

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<sup>1/</sup> See Rural Change--Perspective for the 1970's, John E. Southern and Rural Change in the 1960's, Clark Edmonds and Calvin L. Beale, U.S. Department of Agriculture, Economic Research Service, 1969 National Agricultural Outlook Conference.





include some of the better-educated people, drained from rural areas to cities by the attraction of opportunities for higher education and better career possibilities. But on the other hand, many do not have appropriate skills for urban jobs, knowledge of the job market, or the ability to adapt readily in an urban setting.

There is a growing awareness of the complicated nature of migration patterns, impediments to mobility, and the economic, social, and cultural adjustment experienced by migrants. The Manpower Administration has supported several studies in this field as well as undertaken pilot mobility projects in an effort to establish more of the essential facts concerning migration and the practical problems facing those who wish to move. 2/

One study being completed for the Manpower Administration deals with work and social adjustment of recent Southern in-migrants living in low-income neighborhoods in Cleveland. 3/ This study reinforces others which have shown that the process of migration is not smooth; many had moved in stages and had gained some urban experience before coming to Cleveland. Orientation of new arrivals to a strange environment was mainly through kinship systems. Initial occupational adjustments were affected by traditional patterns of employment. Despite the fact that Negroes had better educational backgrounds than white in-migrants, Negro males generally found entry jobs as laborers and Negro females, as domestic service workers, while white males and females typically began work as operatives. Whites also found jobs more quickly than black job seekers. Negro men were able to improve their employment status later on by changing to other jobs.

A study of Mexican American migratory farm workers settling into middle-sized communities in Michigan shows that this group, despite cultural gaps, seem to be able to make an easier employment adjustment and is generally optimistic about prospects for social and economic advancement. 4/

We tend to stress the adjustment problems of rural residents who are disadvantaged in terms of minority group membership, educational deficiencies, or poverty. However, there is another, perhaps larger, group of migrants who do not have these handicaps. A study just completed for the Manpower Administration deals with the adjustment problems of rural youth from representative counties

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2/ See Rural Workers in Urban Life: An Assessment of the Research, Verden Fuller, a joint publication of the National Manpower Policy Task Force and the Institute of Labor and Industrial Relations, University of Michigan and Wayne State University (in process).

3/ Southern Migrants to Cleveland, Gene B. Peterson and Laure M. Sharp, Bureau of Social Science Research, Washington (in process).

4/ Mexican Americans in Michigan: From Field to Factory, Harvey M. Choldin, Crafton B. Trent, Jr. and Alfred Wilson, Michigan State University, Rural Manpower Center (in process).



in relatively prosperous North Central States. 5/ In these communities up to 90 percent of high school graduates are faced with the prospect of migrating for employment, education, or for induction in the armed forces. Aside from the few who remain to take over the family farm or business, local opportunities for suitable employment are extremely limited. The study suggests that many rural youth who leave make an adequate occupational adjustment, but find adjustment to city life to be a problem, and the return flow of disillusioned noncollege youth from urban to rural areas is a significant pattern.

These studies are bringing into focus the fact that migration cannot be considered merely an economic problem. There is a complex interplay of economic and social factors reflecting many geographic and demographic variables. The most common personal characteristic of persons who move from rural to urban counties is their youth. The high rate of outmovement of persons between the ages of 18 and 29 has tended to distort the age structure of the rural population, resulting in a comparative shortage of young adults in vigorous working ages and a disproportionate number of older persons. This has implications for the birth rate, tax structure, support of public facilities including schools, and attractiveness of rural areas to potential industry.

Current trends in the development of increased mechanization of farm operations, particularly in such labor-intensive crops as tobacco and fruits and vegetables clearly foretell the demand for technical skills requiring more training than is needed for present hand operations. 6/ Progress towards mechanization is uneven, with some crops such as bush beans almost wholly mechanized, while others such as fresh fruit for table use are still some distance from being able to take advantage of machine operations. Thus, the skill requirements of the hired farm labor force may well be determined by future trends in the relative prices of fresh and processed fruits and vegetables, and the applicability of labor saving machines and practices to individual crops. Increased mechanization may result in more custom harvesting of fruits and vegetables similar to the harvesting of grains in the Plains States, with higher skill requirements and wages, and lessened dependence on wives and children to supplement the wages of the household heads.

While the overall need for farm labor will be lower in the years ahead, workers with higher skills will be needed. Such jobs as the operation and maintenance of complex farm machines and application of agricultural science in the cultivation of crops and care of livestock will require additional technical knowledge and judgment.

#### Manpower Services for Rural America

From our standpoint in the Manpower Administration, and this applies as well to agricultural agencies concerned with developing human resources, the problem is how to assist in the necessary readjustments facing rural people.

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5/ Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth, Guy H. Miles, William F. Henry, and Ronald M. Taylor, North Star Research and Development Institute, Minneapolis, September 1962.

6/ See Fruit and Vegetable Harvest Mechanization-Technical Implications, R. F. Carell and G. E. Rosenthal, editors, Michigan State University, Rural Manpower Center, 1969. This is the first of a series of three reports sponsored by the Manpower Administration. The other two reports, Manpower Implications and Policy Implications are in process.





Considering the long-range aspects, the alternative goals for manpower programs are as follows: (1) We could take the position that the role of manpower agencies is to facilitate economic changes that are under way. That is, we could provide labor market information, interarea recruitment services, mobility assistance, and occupational training to supplement the vocational education system. Or, (2) we could work with other agencies in programs designed to influence the location of industry and encourage employment growth in or near rural areas. Actually, the policy of the Manpower Administration combines both of these approaches. We recognize the need to facilitate the movement of people to jobs, but also the value of minimizing human dislocation by cooperating in building a work force which can attract industry to local areas.

However, the very characteristics of the countryside make the task of human and economic development particularly difficult. The scattered population, weakness of schools and other institutions, lack of financial resources, the existence of racial friction in some areas, and an inadequate economic base for industrial development are among the problems that hamper the extension of manpower services and economic development to isolated and remote rural sections. Those areas which are close to growing industrial centers, on the other hand, may be in a more favorable position.

At present, the primary institution for carrying out manpower services in rural areas is the Federal-State public employment service system. Because of limitations of resources, employment offices are usually located in population centers, not readily accessible for many people who could benefit from them. In the past the rural sections were served primarily by farm labor representatives whose function is to provide services to farm workers and employers. Last March the Manpower Administration was reorganized to create a Farm Labor and Rural Manpower Service with a more comprehensive mandate to expand employment service functions and other manpower programs in rural areas.

For the past several years we have been reaching out to rural areas with our regular training and work experience program. The major ones affecting rural people are the Neighborhood Youth Corps, MDTA training, and the Job Corps. Operation Mainstream--a relatively small program--is designed primarily for rural adults beyond middle age. They are employed in community beautification and improvement projects run by public and private nonprofit agencies. The Rural Concentrated Employment Program is a means of bringing together skill training and work experience programs in a coordinated effort directed at counties with significant concentrations of the rural poor. Although we have had some impact under manpower programs, their effectiveness has been limited by the inadequacy of training facilities, employment opportunities, as well as funding. Only a small proportion of the several million rural people in need of manpower services are being reached at the present time.

The responsibility for upgrading the rural work force lies basically with the education system. I was impressed by recent statistics showing that in the nonmetropolitan areas, 6.1 percent of the white persons and 30 percent of the Negroes, aged 25 and over, had less than 5 years of education as of March 1968--5 years being the minimum level that is considered adequate to perform most tasks in an industrialized society. Of course, the educational attainment of youth is higher, but deficiencies still exist in rural areas.



Moreover, those rural youth who attend secondary school do not have a range of vocational education courses that is available for urban youth. Vocational education in rural areas is heavily weighted with agriculture and homemaking courses. Industrial, technical and health services vocational education are now beginning to receive more emphasis, but large numbers of youth growing up in rural areas never have an opportunity for training in the kinds of occupations which exist in the contemporary industrial and business world in which they will have to seek employment.

Investment in human resources is closely related to economic development in rural America. In a study recently completed for us, Niles Hansen makes the point that underinvestment in human resource development has been an impediment to the rural sections of the South and Appalachia in attraction of capital-intensive industries. <sup>7/</sup> Modern industry requires appropriately educated and trained personnel. It is important that rural workers be equipped with marketable skills to prepare them for growing nonfarm opportunities either in rural or urban communities.

For those farm and nonfarm workers who, because of lack of employment opportunities, elect to move permanently to cities, some form of mobility assistance is necessary to avoid serious dislocations and social problems which often result from undirected migration. The Manpower Administration has completed a number of pilot mobility assistance projects under the MDTA. Full-scale programs must await new legislative authorization. Although most people use their own resources to move from one location to another, a considerable number lack appropriate knowledge of the labor market and funds to cover moving costs in order to make a successful adjustment.

Programs to enhance the employability of the work force must be closely meshed with efforts to develop the economy and the infrastructure of rural America. Here the major controversy rages around the kinds of development efforts that are most appropriate. Hansen, in the study I have referred to, suggests the need for a "growth center" strategy which would link lagging areas with sizeable cities which have economies of scale and demonstrated growth patterns. Other writers and policy officials advocate building up the resources of rural areas per se through public and private investment. In either case, the encouragement of nonfarm employment over and above the normal expected growth is essential to give rural workers the choice of working in familiar surroundings or being obliged to move elsewhere for adequate jobs.

This Nation can ill afford the loss of production and income which accompanies the waste in unemployed or underemployed human resources. There is no lack of intent to remedy the known manpower problems of rural America, but the remedies are not so easily formulated or carried out. Recently the President's Council for Rural Affairs was established for the specific purpose of examining the problems and recommending steps to lessen if not eradicate them. The fact that the President himself is chairman of this council of cabinet officers underlines the importance given to rural problems in the agenda of national goals and priorities.

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<sup>7/</sup> Urban and Rural Dimensions of Manpower Policy, Niles M. Hansen, University of Kentucky, June 1969.





Summary of talk by  
William H. Kolberg  
Associate Manpower Administrator for Policy, Evaluation, and Research  
United States Department of Labor  
at the  
National Agricultural Outlook Conference  
Washington, D.C.

February 19, 1970

"There must be a growing realization that the rural sector cannot be considered a separate compartment isolated from urban areas," said Mr. William H. Kolberg, opening his talk before the National Agricultural Outlook Conference in Washington, D.C.

Mr. Kolberg, Associate Manpower Administrator, U.S. Department of Labor, added, "Rural people in the 1970's must be prepared for an economy that is becoming more and more integrated with that of a country as a whole and they must be given services and training accorded urban residents."

Mr. Kolberg proposed basic adjustments in rural vocational and education systems. He said, "Industrial, technical and health services in vocational education are now beginning to receive more emphasis, but large numbers of youth in rural areas never have an opportunity for training in the kinds of occupations which exist in the contemporary industrial and business world in which they will have to seek employment." He also suggested some form of mobility assistance for farm and nonfarm people seeking employment outside their region.

The rural labor market has deteriorated in the past 25 years. Farm production has soared, but manpower needs shrank because of mechanization. Current trends indicate greater use of machines in such labor intensive crops as tobacco, fruits and vegetables. Last year the national unemployment rate averaged 3.5 percent but for agricultural workers the rate was a staggering 6 percent, highest



of any industry. Rural areas have also suffered the decline in the mining industry. Each step along the road has been in the direction of more technical equipment and complex jobs demanding greater skills. Too often rural residents are totally unequipped to do these jobs. These factors have led to a worker surplus and stimulated large-scale movement to urban areas by rural residents.

Mr. Kolberg called for a review of the country's manpower policies. He said "the problem is to determine the needs of the population living in the countryside for education, training, and other forms of human resource development to enable them to share in the economic advance of the country as a whole. "

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR OILSEEDS, FATS AND OILS

Talk by George W. Kromer  
Economic and Statistical Analysis Division  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 9:15 A.M., Thursday, February 19, 1970

U.S. soybean supplies in 1969/70 are up for the sixth consecutive year to an estimated 1,441 million bushels, compared with 1,269 million in 1968/69. An anticipated 13 to 15% increase in consumption, over the 1968/69 record of 945 million bushels, reflects continuing strong crusher and export demand for soybeans. In fact, the uncertainties in world supplies of competitive fish meal and oil and sunflowerseed oil could result in an even larger increase--with total use approximately balancing the 1969 soybean crop. Thus, the carryover next September 1 may only moderately exceed, at most, last September's 324 million bushels.

Prices received by farmers for soybeans increased from \$2.23 per bushel during the heavy harvest last October to \$2.36 in January 1970, averaging about 10¢ below a year earlier. Prices are expected to increase further, reflecting continuing strong demand and substantial withholding by producers. Next summer the trade may need to buy some soybeans from CCC as "free" supplies tighten.

The price support for 1969-crop soybeans is \$2.25 per bushel, No. 1 grade, compared with the 1968-crop rate of \$2.50 per bushel, No. 2 grade. This year's rate represents a net reduction of about 30¢ a bushel from the 1968 support rate since No. 2 grade soybeans usually sell about 5¢ per bushel below No. 1. USDA announced February 5 that 1970-crop soybeans will be supported at \$2.25 per bushel, unchanged from the 1969 level.

Producers can receive price support on 1969-crop soybeans through farm and warehouse storage loans and purchases, either as individuals or through CCC-approved cooperative marketing associations. Loans are available through May 31, 1970, and will mature June 30, 1970. These dates are 1 month earlier than in the 1963-68 period.



As of December 31, 1969, the CCC owned or had under resale a total of about 294 million bushels of soybeans from the 1966-68 crops. This, plus the 138 million bushels of 1969-crop currently under CCC loan, brings the total withheld to 432 million bushels---approximately 30% of the 1969/70 soybean supply.

In contrast to lower soybean prices so far this marketing year, soybean oil and meal prices have been up, resulting in the most favorable processing margins since 1965. The spot price spread between soybeans and the total value of oil and meal per bushel at Decatur averaged about 52¢ in September-January, compared with 15¢ in the same months the year before and 42¢ in 1965. The margin for all of 1968/69 averaged 12¢.

Favorable processing margins are stimulating a record crush and many processors have been operating at or near capacity. September-January crushings totaled around 297 million bushels, up about 46 million from a year earlier. The record output of oil and meal is moving into marketing channels, and crushers' and refiners' stocks remain relatively low. Crushings for the entire marketing year may total 675 million bushels, or above, up from 606 million in 1968/69.

Based on trade estimates, the U.S. soybean processing capacity during the current season is placed at around 770 million bushels, up slightly from 1968/69. On this basis, the processing industry this year is operating close to 90% of its capacity compared with 81% in 1968/69, and well above the long-run average utilization rate of 80%. The soybean industry usually expands its processing capacity in years following those of favorable operating margins---and 1970/71 likely will not be an exception.

An estimated 340 million bushels of soybeans will be exported in the current marketing year. The final level will depend upon further foreign developments. This would be up from 287 million in 1968/69. Expanding foreign demand reflects continued growth in poultry and livestock production, reduced competition from other oils and meals, and a general strengthening in world fats and oils prices compared with a year earlier. From last September 1 through February 6, about 192 million bushels of soybeans were inspected for export against 136 million the same period last year. The increase over last year continued to widen sharply through mid-February; a year ago the Atlantic and Gulf Coast longshoremen were on strike.

Europe and Japan are taking most of the increased soybean exports this year. European livestock producers are continuing to stress efficiency in meat production which requires the use of high-protein feeds. U.S. exports to Japan are increasing mainly because of slightly lower soybean prices, little change in imports from Mainland China, further expansion in the poultry and livestock industry, and expanding vegetable oil consumption.



Soybean oil supplies for the marketing year ending September 30, 1970, are estimated at around 7.6 billion pounds, about 8% more than in 1968/69.

Domestic use is placed at 6.2 billion pounds, compared with 5.8 billion in 1968/69. The trend toward use of more soybean oil per person and increased population are helping to boost consumption levels. Also, production of competitive cottonseed oil, peanut oil, lard, and butter are somewhat less this marketing year. Domestic disappearance of soybean oil in October-December totaled 1.6 billion pounds, a new high for this quarter and nearly 15% above the year before.

Domestic use of soybean oil in the 1960's rose from 3.3 billion pounds to 6.2 billion forecast for 1969/70. The monthly average rate of domestic use during the decade rose from about 275 million pounds to 520 million. Each of the major food categories benefited--shortening, salad and cooking oils, margarine, and other edible uses. Soybean oil's inedible uses, which comprise about 10% of domestic use, have increased only slightly in recent years.

The largest increase in soybean oil usage in 1968/69 occurred in the salad and cooking oils category. Following a steady uptrend for this category over the years, recent increases have been sharper. Commercial uses of edible oils in the production of mayonnaise, salad dressings, potato chips, frozen french fries, bakery food mixes, and other prepared foods have expanded for some time. But the recent big impetus in oil usage probably is partly due to the ever-increasing number of convenience or fast-food service establishments that sell fried foods. Their further growth will mean demand for more soybean oil.

Soybean oil exports in 1969/70 probably will not differ much from the 0.9 billion pounds shipped last year. About 85% of our soybean oil was exported under P.L. 480 in 1968/69 and program activity continues near that level. India and Pakistan are the principal recipients under P.L. 480 oil programs. U.S. soybean oil exports were 279 million pounds in October-December, up from 259 million the year before. Pakistan, Tunisia, and India accounted for 60% of the total.

World demand for soybean oil continues to increase. However, the large amount of oil produced from U.S. soybeans processed overseas limits the soybean oil that the United States can export to Western Europe and Japan. The oil equivalent of U.S. soybean exports in 1969/70 is estimated at 3.7 billion pounds (340 million bushels containing 11 pounds of oil per bushel) compared with 3.2 billion pounds (287 million bushels) a year ago.





Soybean oil prices (crude, Decatur) declined from about 11¢ per pound last October-November to 9-1/2¢ in January, averaging 10¢ compared with 8¢ during October-January 1968/69. Prices the rest of the current marketing year probably will remain fairly steady, averaging above the 8-1/2¢ per pound level in 1969.

Soybean meal supplies for the marketing year ending September 30, 1970, are estimated at about 16.2 million tons, up from 14.7 million last year.

Domestic use is placed around 12.6 million tons, up nearly a tenth. Relatively high livestock prices, more protein-consuming animals to feed, along with short supplies and high prices of fish meal and cottonseed meal are contributing to the unprecedented demand for soybean meal feeds. Domestic disappearance of soybean meal during October-December 1969 totaled 3.2 million tons, a new high for this quarter and 8% above the year before. In January severe winter weather further increased domestic soybean meal consumption.

Exports of soybean meal in 1969/70 are expected to rise to around 3.4 million tons, about a tenth above last year. This prospect is based on continued strong demand for feed and relatively high prices of corn and other feed grains in Western Europe, reduced availabilities of competing meals, particularly fish meal, and expanding use of high-protein rations due to increased poultry and pork production. Western Europe usually accounts for at least three-fourths of the total U.S. soybean meal exports. During October-December 1969, total U.S. soybean meal exports were 1,069,000 tons compared with 811,000 the year before.

Most of the prospective increase in U.S. meal exports during 1969/70 will be in soybeans rather than meal as such. The meal equivalent of U.S. soybean exports this year is estimated at about 8.1 million tons (340 million bushels containing 47.5 pounds of meal per bushel) compared with 6.8 million tons in 1968/69.

Monthly average soybean meal prices (44% protein, bulk, Decatur) increased from \$70 per ton in November to \$87 in January. The sharp rise in market prices reflects tight supplies and record domestic and export demand. Much of the soybean meal probably was contracted for at lower prices than current levels. Crushers were running near capacity but not enough meal was produced to fill the heavy demands.

The 1969 cottonseed crop totaled an estimated 4.3 million tons, compared with 4.6 million in 1968. Cotton harvested acreage increased 9% but cottonseed yield per acre, at 770 pounds, dropped 15%. The season average price received by farmers was \$40.70 per ton compared with \$50.50 in 1968. Lower





prices reflected a similar drop in the price support rate--from \$48 per ton in 1968 to \$37 in 1969. USDA announced February 5 that 1970-crop cottonseed will also be supported at \$37 per ton. The 1969 crop is expected to yield around 1.3 billion pounds of crude cottonseed oil and 1.9 million tons of meal--both down slightly from the previous year.

Cottonseed oil supplies for the marketing year ending July 31, 1970, are nearly 1.8 billion pounds, up a tenth. The 1969 cottonseed crop fell 8%, but carryover stocks of oil (mainly in CCC hands) increased. Domestic use is running slightly above last year's near-record low of 1.0 billion pounds but exports are up sharply, due to increased commercial sales in addition to large CCC shipments. Cottonseed oil prices in August-January averaged about 12% below a year earlier.

Lard production for the current marketing year is estimated at 1.8 billion pounds, nearly a tenth less than a year earlier. Lower output stems from smaller hog slaughter and the continued decline in lard yield per hog.

In 1968/69, lard yield per hog averaged 22.6 pounds, down 1.6 pounds from the previous year and 10 pounds below 1956. Lard yields have declined for 10 consecutive years, and the rate has accelerated in the past few years. At the same time, pork yields per hog have increased--from 132 pounds in 1956 to 152 in 1968. This reflects the trend toward increased production of the meat-type (leaner) hogs; the average live weight per hog slaughtered has changed little over the years.

Domestic use, estimated at nearly 1.6 billion pounds, would be down a tenth from 1968/69. Lard prices are expected to continue strong, encouraging increased use of lower priced substitutes. Exports and shipments in 1969/70 may fall short of the 281 million pounds shipped last year, due to reduced availabilities and relatively high prices. Lard exports are being aided by USDA payments to exporters of U.S. lard to the United Kingdom. Since the start of the program in January 1969, USDA has accepted 277 million pounds of lard for export (170 million prior to October 1, 1969). Initially, the payment rate was set at 2.0¢ per pound, compared with 3.345¢ for European lard. In August 1969, the U.S. rate was reduced to 1.0¢ per pound. Beginning February 1, 1970, the EEC rate was pegged at 2.2680¢ per pound, down from the previous rate of 2.4948¢.

Lard prices during October-January averaged 11-1/2¢ per pound, about 4-1/2¢ above a year ago. Prices have rebounded dramatically from their low levels of around 5-1/2¢ per pound in the summer of 1968, when they were the lowest in nearly 30 years. Since then, smaller lard supplies plus a tighter supply outlook for many major world fats and oils boosted prices upward.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

PROBLEMS WITH THE OLD WELFARE PROGRAMS AND SOME NEW PROPOSALS

Talk by J. Paxton Marshall\*  
Extension Division, Virginia Polytechnic Institute  
at the 1970 National Agricultural Outlook Conference  
Washington, D. C., 1:30 P.M., Thursday, February 19, 1970

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Our language contains the word welfare--a term having its origin in the Middle English wel faren: to fare well--the state of doing well especially in respect to good fortune, happiness, well being, or property. Irony suffuses our language. Consider that in 1969, when after-tax personal income averaged \$3,100 per person, for 204 million people, and the 4-person family poverty threshold was \$3,555, welfare benefits for 4-person AFDC families varied among the states from a high of \$3,215 to a low of \$480, on an annual basis.[1] In such an economy welfare does not mean prosperity. It need not mean happiness or well-being. Some, though, may choose to assert that it represents good fortune. This assertion need not be incorrect, for, seemingly, any discussion of welfare contains subjective elements.

Our existing welfare policy reveals the heritage, and traditions and customs which we evoke when considering assistance to individuals and families who, for many reasons, are unable to support themselves. The results reflect the principles society has distilled from past experience, and record man's individual and collective progress toward accepting the concept that every human has dignity and worth. Moreover, our present dialogue about welfare reform demonstrates that new factors can prompt a society to reassess its principles and concepts and to analyze their impact upon existing and proposed welfare policy.

The Existing Welfare Program

Normally appreciable progress takes place in welfare policy only when a society solves its discontinuities, to use a term made popular by Peter Drucker. Since our existing welfare programs--Aid to the Blind (AB), Aid to the

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\* The author wishes to acknowledge using as a basis for this paper the bulletin Family Income Maintenance: Some Options, developed by the Extension Public Affairs Committee of the Southern Region, and being printed by the Extension Division of Virginia Polytechnic Institute with grant funds made available by the Farm Foundation.



Permanently and Totally Disabled (APTD), Aid to Families with Dependent Children (AFDC), and Old Age Assistance (OAA)--are rooted in another "Age of Discontinuity", [2] a brief background statement should be appropriate.

Public assistance or welfare programs were transferred from a solely state and local government responsibility to a Federal-State responsibility when Congress adopted the Social Security Act of 1935. That legislation assigned program administration to states, with programs to be carried out in accord with the federally accepted State Plan developed by each state. Determination of the eligibility of individuals to receive benefits was assigned to the local or state level, and judgment was to be based on state-wide rules. Financing welfare payments became a joint local, state and federal responsibility.

This arrangement used 4 welfare programs as a base, but the result produced a multitude of such programs. A uniform program did not result and has not developed among the states. At present, this lack of uniformity is most quickly, though most shallowly, illustrated by comparing the high and low payment per recipient made per month through the programs by the several states. For example, in May 1969, benefits for Aid to the Blind (AB) ranged from \$151.35 to \$49.15 per month. Benefits for recipients of payments under the Aid to Families with Dependent Children-Unemployed Parent (AFDC-UP) programs ranged from \$70 to \$24.80 per month, Table 1. The AFDC-UP program has been adopted by only 25 states.

Table 1.--Public assistance payments: High and low state payment per recipient, by program, with number of state programs, May 1969

Program	State programs*	State payment**	
		High	Low
AB	54	\$151.35	\$49.15
APTD	53	132.80	41.40
OAA	54	116.00	39.50
AFDC	54	66.70	10.00
AFDC-UP	25	70.00	24.80

\* Includes Guam, Puerto Rico and Virgin Islands.

\*\* Contiguous states only.

Source: U. S. Department of Health, Education, and Welfare, Welfare in Review, Vol. 7, No. 5 (September - October, 1969), pp. 45-52.

Although the AB, APTD, and the OAA programs are not without critics, among the welfare programs only the AFDC program may be legitimately termed controversial. Indeed, it combines, as Gilbert Steiner of the Brookings Institution recently observed, " . . . problems of race, of sex, of religion, and of family relationships." [3, p. 4] Rapidly rising numbers of AFDC recipients and the resulting rise in costs supply the controversy with fuel. Even placing barriers to eligibility did not halt the growth in the number of AFDC families. For example, AFDC recipients were 48 percent of 5.2 million



Table 2 .--Nixon Administration proposal: Guaranteed income \$1,600, breakeven income \$3,920, with cost of working allowance, and food stamps, 4-person family

a	b	c	d	e	f	g	h	i	j
Before-tax family income	Basic income allowance	Cost of working allowance	Negative taxable income (a - c)	Negative tax rates (percent)	Negative tax (d x e)	Cash pay-ment (b - f)	After-tax family income (a + g)	Bonus food stamp value**	Income plus stamps (h + i)
\$ 0	\$1,600	\$720	\$-720	50	\$ ---	\$1,600	\$1,600	\$720	\$2,320
500	1,600	720	-220	50	---	1,600	2,100	425	2,525
1,000	1,600	720	280	50	140	1,460	2,460	280	2,740
2,000	1,600	720	1,280	50	640	960	2,960	200	3,160
3,000	1,600	720	2,200	50	1,140	460	3,460	125	3,585
3,920*	1,600	720	3,200	50	1,600	0	3,920	80	4,000

Note: Based on data in appendix of President's Message to Congress, August 11, 1969; Statement by Secretary of Health, Education and Welfare Robert H. Finch, before the Senate Select Committee on Nutrition and Human Needs, September 15, 1969, p. 4; and Hearings on Food Stamp Program and Commodity Distribution Programs before the Committee on Agriculture and Forestry, 91st Congress, 1st Session (1969), p. 4.

\* Breakeven income

\*\* Bonus food stamp value is the value of stamps above their cost. Numbers between \$720 and \$80 are estimated.

Source: Family Income Maintenance: Some Options, a bulletin developed by the Extension Public Affairs Committee of the Southern Region, and being printed by the Extension Division of Virginia Polytechnic Institute.





recipients of public assistance benefits, when the "man-in-the-house" rules rules imposed in 1950. Despite this and other barriers, AFDC numbers rose to 69 percent of the 9.5 million persons receiving public assistance benefits in mid-1969. The controversy grew more intense, and answers were demanded for perplexing questions:

- Why did the number of children receiving AFDC payments double between 1950 and 1960, and triple between 1960 and 1968?
- Why did the number of families with fathers in the "not married to the mother" status rise from 21.3 percent of the total to 26.8 percent between 1961 and 1967?
- Why did the number of families with fathers in the "absent from the home" status triple between 1950 and 1960, and double between 1960 and 1968?
- Why did the number of AFDC cases opened for Negroes suddenly develop completely new patterns about 1962 and continue to rise when unemployment rates among the Negroes declined?

These questions and others have had much attention.

Among many papers about the AFDC program one by Robert Lampman of the University of Wisconsin lists many factors in the complex that has interacted to produce the existing situation.[4] According to Lampman decreases in AFDC numbers should have occurred because:

- The idea that mothers should work for money income has been accepted more and more.
- Social insurances and veterans benefits as a means of income support have gained in importance.
- Restrictive policies have been developed including:
  - the Notification of Law Enforcement Officials (NLEO) amendment in 1950, designed to secure support payment from absent fathers,
  - a 1950 amendment permitting publications of names of AFDC recipients,
  - more restrictive state residence rules, and
  - new laws relating to the "man-in-the-house" rule and "suitable homes."
- Incomes have risen and unemployment rates have declined.

Lampman attributed increases in AFDC to several other factors:

- A long-term change in the view that "[t]he loss of moral integrity (associated with receiving welfare [payments]) was considered a greater evil to the poor than their poverty" occurred.[5, p. 5]



Opinion shifted toward the view that it is desirable to help all poor children in their homes, even though their parents may not be "fit and worthy."

--An easing of demands on OAA programs had the political effect of freeing "welfare funds" for AFDC.

--The Congress liberalized programs by legislation

- in 1961 that extended AFDC programs at state option to the unemployed parent,

- in 1962 that extended coverage to foster homes,

- in 1964 that raised the maximum age for federal sharing to 21, and

- in 1967 that placed a freeze on the number of AFDC recipients, causing a surge of applicants attempting to qualify before the deadline for cutoff, which was subsequently repealed.

--The liberalization by non-Congressional means is evident as

- state legislatures refused to handle substantive issues, allowing centralized administrations to make "professional" decisions when interpreting broadly-worded statutes,

- state-wide uniformity in administration, including in some cases taking over of county programs, becomes a trend,

- welfare offices were relocated for easier access, with social workers acting as advocates for their clients,

- courts hold that welfare recipients have rights to due process and equal protection of the laws, and

- a 1967 Bureau of Family Services directive requires that states do not violate individual privacy or personal dignity of recipients.

--States have changed the eligibility rules regarding the property resources a family may keep, liens on real estate, and financial responsibility of relatives.

--The waiting period before being eligible for benefits when moving into a state has been reduced.

--States raising income levels below which aid is granted and raising the share of "budget" need they will meet, plus the retention of a portion of earnings being allowed by a 1967 amendment.

--The number of female-headed families has risen as a social trend.

--Urbanization has increased.



Another factor affecting the AFDC program is that some fathers may actually make rational economic choices under the existing rules, by being "absent-from-the-home." For example, if a father who becomes unemployed is in a state that does not have the AFDC-UP program, the family income could drop to 0 if the father continues to live at home. But if the father becomes "absent-from-the-home", the family will (at least technically) become eligible for an income equal to the state AFDC payment. This choice may also be rational when the male involved possesses only a low level of skill and, consequently, an earning ability that produces a total income less than the state AFDC payment. Moreover, at least until recently, a 100 percent "tax rate" applied to earnings of recipients of welfare payments, which means that payments were reduced \$1.00 for each \$1.00 of earnings. In addition, accepting a job meant losing all benefits and did not assure acceptance in the program if unemployment occurred at a later time. As a result, disincentives to work toward self-support surround the existing welfare programs. Whether or not these program disincentives were responsible, 93 percent of the AFDC increase from 1961 to 1967 took place in cases where the father was "absent-from-the-home." [6]

With the advent of a national policy to reduce and eliminate poverty the controversy over AFDC broadened. At that point, the economic relationship of the "working poor," the AFDC payments, and the poverty threshold became a focal point in the controversy. Among the 25.4 million persons with incomes below the 1968 poverty threshold of \$3,555 some 9.4 million received some income support from public assistance and 16 million persons were in families supported by a head of household who worked full-time--the "working poor". Incomes of families in the "working poor" group average about \$1,000 below the poverty threshold. For those families supported by a full-time job 52 weeks per year, 40 hours per week at the \$1.60 per hour minimum wage produces a total income of \$3,238, an amount \$200 below the poverty threshold for a 4-person non-farm family. Some 10 million jobs, " . . . including some State and municipal government jobs, . . ." pay less than the current minimum wage. [7, p. 9]

So conflicts in the existing welfare program surface. An AFDC recipient 4-person family normally has benefits that result in an annual total income that is substantially, sometimes drastically, below the poverty threshold. Also, in almost all states, the 12 monthly payments to AFDC recipient 4-person families is less than the \$3,100 national average after-tax personal incomes per individual. Program disincentives discourage recipients of payments from engaging in work. Program incentives also encourage family break-up to achieve eligibility. Thus, the present program discriminates between the "working poor" and some recipients of welfare payments; conflicts with the work principle that is deeply ingrained in our society; and, reflects severe pressures upon the fragile fabric of family stability. Altogether, the existing welfare program discriminates between families with similar family, economic and social problems, depending upon where they live and often living in the same locality.

#### Some Factors Involved With Welfare Reform

With our changing priorities, reform of public assistance appears to have general support. Achieving an acceptable reform of public assistance programs requires more than making a judgment about proposed levels of payments to





recipients and the resulting total cost. After numerous levels of payment have been proposed, with the 4-person family minimum ranging from \$1,600 to \$5,500, rather general agreement exists that the cost of many proposed reforms in public assistance would not unduly burden the public treasury.

Even though money income may be the basic element needed in improving the lot of the poor, that is not the only consideration as C. E. Bishop, formerly Executive Director of the Rural Poverty Commission and now of The University of North Carolina, has observed:

If we are to meet the needs of the poor, we must decide what these needs are. It is frequently stated that 'the poor want food in their stomachs, clothing on their backs and a roof over their heads.' But I believe that the poor have four more basic wants. First, and perhaps foremost, they want personal respect . . . .

Second, those who are poor are seeking social justice. This is a concept that is very difficult to define. But basically, they seek the same privileges and opportunities enjoyed by others in society.

Third, the poor are seeking economic opportunity, a way of earning their own way. Many of them own nothing other than their labor. They are looking for a way to increase their productivity and to obtain satisfactory employment.

Fourth, the poor want a political voice. They desire to help to determine their own destiny. They want to be sure that the people who represent them are really making their wants known.

In our efforts to develop a program to meet the needs of the people, we must keep these needs clearly in mind.[8, p. 8]

Even this does not complete the framework within which proposed changes in public assistance policy are discussed. That framework also contains basic principles that impinge on any proposal for the reform of public assistance.

From among the principles, or deeply-rooted moral values, professed by our society, James Tobin of Yale University, names 3 that are prominent wherever public assistance is discussed.[9, p. 97] They are the Protestant ethic, social responsibility and equality of opportunity. Any thorough discussion about these principles takes a book, and numerous ones have been written, but here a brief statement about each must suffice.

Our society accepts the Protestant ethic: the conviction that "He who does not work should not eat." Furthermore, as Max Weber noted " . . . the earning of money . . . is the result and expression of virtue and proficiency in a calling . . . an obligation which the individual is supposed to feel . . . ." [10, p. 53] Therefore, an explicit assumption of our current public assistance policy is that all able-bodied persons should, to the greatest extent possible, support themselves by their own efforts. An implicit assumption is that those receiving public assistance do have access to work and can perform the available work in the desired manner. After examining this principle and the situation in which the poor are existing, the Commission on Income Maintenance Programs stated:





It is often assumed that anyone who wishes to live well can achieve that objective by seeking and accepting work. [And,] [i]t is often argued that the poor are to blame for their own circumstances and should be expected to lift themselves from poverty . . . . These assertions are incorrect . . . .

The simple fact is that most of the poor remain poor because access to income through work is currently beyond their reach.[7, p. 48]

The principle of social responsibility, which holds that no one should fall below a decent minimum level of living, was accepted as an obligation of the Federal government in the mid-30's. Public assistance was directed to assisting those who remained indigent after they had exploited all sources of income from property, work and family. At that time income support programs such as social security and commodity price supports were related to property or work in almost every case. That was before dramatic rises in productivity enabled agriculture to cast out people who became excess as well as land that became marginal. That was before it was widely understood

- that educational opportunity was the critical factor that enabled people to obtain alternative employment,
- that people with resources from which they once earned an acceptable income could have their income reduced and property values lowered by the effect of government policy, or
- that the burden of unemployment resulting from an economic disinflation fell randomly upon individuals and families without fault of their own.

Our social consciousness tells us that the effects of all these things may contribute to the net benefit of the total community but that the people disadvantaged in the process should in some way be compensated.[11, p. 3]

The principle, equality of opportunity is manifest in the documents creating our nation. Although as Lynn Daft writes " . . . we are not prone to guarantee that everyone finishes together, a sense of fair play demands that we all start together, or have the 'opportunity' of doing so." [11, p. 4] Our sense of fair play applies especially to children. They should have some minimum level of opportunity so the "cycle of poverty" can be broken. The evidence is that many, perhaps most children receiving AFDC payments are not at an acceptable minimum level of opportunity. Children receiving some support from AFDC in 1969 equalled 6.8 percent of our nation's 72 million children under 18, yet " . . . less than one-third of all poor children receive [AFDC] benefits." [4, p. 2] That may evoke immediate comments that relate to the " . . . problems of race, of sex, of religion, and of family relationships . . . ." named by Steiner. Nonetheless, these children do not vote to be born, or choose not to be born to the land, or elect not to have a father. The foot race of equality of opportunity in life starts early. No objective research concludes to the contrary.

So within this complex framework the talk about reforming our current public assistance programs takes place. Numerous questions arise in the discussion. Which member of an AFDC family is responsible for his forebears not taking a homestead in the 1800's? How do you successfully penalize the



children of a family for their parent's lack of access to educational opportunity? If you can spend 60 years successfully leveling down the excessively high incomes in a society by installing an income tax policy, would a policy directed toward leveling up the excessively low incomes in a society by installing an income maintenance policy prove equally effective in raising the general level of living in that society?

### Welfare Reform--Some Proposals

In essence, welfare reform means making an advance in our concept of entitlement. Who is to benefit and by what criteria? The concept of entitlement involves more than recognizing that the poor lack access to enough money to provide their basic needs. There is also a core issue: Should entitlement be other than labor and property related; that is, should individuals or families be eligible for a cash transfer payment when their income is less than some established minimum amount even though they are working and do own property? From the effect of that question are reflected the basic classes of proposals for welfare reform, and from it flow many others that must remain implicit in this discussion.

Debate about welfare reform centers on proposals that may be classed as (a) family-income based, (b) children's allowances, and (c) guaranteed employment. These classes are long-standing. Because many proposals have been put forth, only a few can be discussed in detail, and they have at least one feature in common: All would be financed from the general tax revenues.

### Family Income-Based Proposals--

The basic criterion for entitlement under these proposals is the need for money income, not the cause of a family's lack of income. Although the design of income-based proposals differ, agreement exists on the need to develop a plan that (1) provides an adequate minimum income to families with little or no earning capacity, (2) has a strong work incentive, (3) limits payments only to those who are in need, and (4) limits the total cost.

How the income-based proposals function is easily understood. For a family to become eligible for cash transfer payments, the family income must be less than some amount, called the "breakeven" amount. Eligibility would continue until family income rises to the "breakeven" amount; then the cash transfer payment stops. Two questions dominate: What is the "breakeven" amount to be? What incentive is necessary to encourage a family to strive to raise income above the "breakeven" amount? With the answers to these questions go the problems of deciding eligibility criteria and the necessary administrative procedures.

Within the past year, two family income-based proposals were presented--the Family Assistance Plan proposed by the Administration and a proposal by the Commission on Income Maintenance Programs. These proposals are not independent of discussions about welfare reform that took place during the 1960's, and a brief background statement seems appropriate.

In his book Capitalism and Freedom, published in 1962, Milton Friedman argues that individuals and families should be entitled under federal income



tax rules to benefit in the form of a cash payment if their income is less than the total of their personal exemptions and standard deductions, which we may call the basic income allowance. The benefit proposed would equal a percentage of the difference between actual income and the basic income allowance. The percentage applied was called a negative tax rate, and a 50 percent rate was suggested. Thus, for each \$1.00 actual income of a prospective taxpayer was below the "breakeven" amount a cash transfer payment of \$0.50 would be made. In practice actual income tax exemptions and deductions would apply, and any family with abnormal expenses such as medical costs would become eligible for assistance, not just poor families. This proposal does not use a minimum income support, a feature used in later proposals that turn them into the equivalent of a guaranteed income.

The negative tax idea was applied by others. Robert Lampman suggested using graduated negative tax rates to encourage work and assist families whose incomes were below the poverty threshold, with the "breakeven" amount varying with family composition. Edward Schwartz of the University of Chicago suggested a 100 percent negative rate, which, of course, meant that for any family with actual income less than the poverty threshold the total difference would be filled by a cash transfer payment.

These ideas were extended by James Tobin and others at Yale University in 1967.[12] They suggested a minimum income support level about equal to the poverty threshold below which incomes would not fall. Then, to encourage work and earnings, a 50 percent tax rate was applied to earned income, with a "breakeven" amount equal to 2 times the family's minimum income support.

Both recent proposals for welfare reform have applied the idea of the negative tax rate and the idea of the minimum income support level. Thus, both proposals expand welfare reform to encompass the concept of income maintenance. Consequently, under both plans all poor families would be entitled to cash transfer payments if they otherwise qualified for eligibility.

#### Family Assistance Plan--

This proposal contains

- a set of rules for eligibility that would apply uniformly nationwide and that could be administered by the states,
- a national minimum income payment for eligible families,
- a "workfare" requirement to register for employment and accept training and suitable work, if offered,
- a cost of working allowance,
- an assumption of responsibility by the Federal government for providing the minimum income payment, and
- eligibility for food stamps, when available to the community.



The national minimum cash payment proposed is \$500 for each of the first 2 family members, who may be 2 adults or 1 adult and 1 child, under age 18 or a student, plus \$300 for each child in the family. Neither sex nor place of residence affects the amount of the payment. A 4-person family with no income receives a payment of \$1,600. Such a family could, as the program was proposed initially, spend from its monthly payment \$40 to purchase food stamps worth \$100 if they were available in the community. (Changes announced on December 18, 1969, enable a 4-person family to purchase for \$34 per month, food stamps having a bonus value of \$106 per month.) If a family whose only income was the \$1,600 payment purchased food stamps having a bonus value each month of \$60, the minimum annual assistance rises to \$2,320. To encourage work the cash payment is reduced by \$0.50 for each \$1.00 of income from such things as earnings from work, earnings from self-employment, and income from social security pensions, rent, et cetera. An additional inducement to work is provided by a \$60 per month cost of work allowance. Thus, as shown in detail in Table 2, the "breakeven" amount is \$3,920 if a family does not purchase food stamps and \$4,000 if food stamps are purchased. Thus, a family that purchases food stamps, assuming they are available in the community, would have an effective negative tax rate somewhat higher than the normally discussed 50 percent. That illustrates one problem with this proposal. The disincentive to work rises as income rises, and the negative







tax rate continues to rise approaching 100 percent, when states supplement the payment and income and other taxes apply. This is inconsistent with the basic objective of offering an incentive to work.[13, p. 1957]

Eligibility for benefits would extend to families with either a male or female head, and the family with the father at home would be eligible. Since the program is categorical, that is, it applies only to families with children, couples without children and single individuals with incomes below the minimum level are not eligible. This means that women without children as a result of divorce, desertion or being single would not be eligible. (Benefits would be increased, however, for persons covered by the AB, APTD, and OAA program.)

Before a family would become eligible their counted resources could not exceed \$1,500. Savings such as the cash value of insurance policies would be among the counted resources. Thus, because a family with an insurance policy valued at \$2,000 would be ineligible, it has been suggested that the limit on counted resources be higher, perhaps \$5,000.[14] Certain resources are excluded, in particular the home, household goods, personal effects and property essential to the family's means of self-support. The exclusion of such assets on an unlimited basis has been criticized as " . . . an incredible loophole for those who might have a great deal of wealth in such forms. It also provides an open invitation for others to shift their assets into these forms before applying." [15, p. 2464] Therefore, it was recommended that (after modest exclusions for home and occupational equipage) only a fraction of net worth, say 10 percent, be excluded so the relatively well-to-do would consume some assets or borrow against them. The problem of asset exclusion is particularly complicated where farm owners are concerned.

That all persons who do work do not receive their income regularly is a reality with which family assistance must deal. Farmers and other self-employed often receive income on a semi-annual or annual basis, and major variations often occur from year-to-year. Even after the problems of determining what income is to be counted for such persons, they could have long periods when their lack of income would make them eligible for benefits, yet on the basis of their average annual income they would not be eligible. The proposed quarterly accounting period does not adequately handle this problem.

As proposed, Family Assistance includes a credit for work-related expenses, a credit provided by 1967 legislation. However, the \$60 monthly allowance applies to only 1 family member. Additional family members who could earn nonexcluded income will also have work-related expenses, and though they may not work full-time, credit for such expenses during periods when they do work is reasonable, if encouraging work is an objective.

An often overlooked Family Assistance Plan feature is that it is based on not 1 but 2 legislative packages--a cash payment package with its rules and a food stamp package with its rules. This will create a need to have a carefully coordinated administration.

A third administrative unit is involved in the "workfare" portion of Family Assistance, which would require nearly all male adults and many female adults to register with the local employment office as a prerequisite of eligibility. Individuals who did not have jobs would be expected to accept



training and/or employment, if suitable, as a requirement for continuing eligibility. The decision about "suitable employment" would remain at the local level. Since many otherwise eligible persons may not be capable of handling available jobs requiring relatively high skills, and since highly skilled persons suffering unemployment may be unsuited for the available jobs, "workfare" is not without aspects of coercion and potential discrimination. Thus the popularity of "workfare" may exceed its practicality.

Although the rules for eligibility would apply nationwide, individual states would have an option of administering all or some part of the total family assistance program. Experience with existing public assistance programs suggests that, if widely adopted, this option will add to the existing multiplicity of programs and to the issues already relating to state administration problems. Since the option of having the program administered at the federal level exists, the fact that the Governors Conference of September 1969, by a vote of 49 to 1, favored an all-Federal program, seems pertinent. Despite any advances toward welfare reform that may be associated with the proposed Family Assistance Plan, continuing the existing administrative framework raises the potential of nullifying " . . . any real movement toward uniform, humane, and reasonably faithful implementation . . ." of those advances.[15, p. 2460]

An estimate places the initial annual cost of this proposal at \$4.0 billion. A substantial rise in public assistance payments made to AFDC recipients would occur in 8 states, all of which are in the South. The 1.4 million eligible families in rural areas would be entitled to estimated benefits of \$1.4 billion.

Attention is not directed in the proposed Family Assistance Plan per se to the difficult problem of making jobs available to those who would not otherwise have access to opportunity to work. This " . . . is fatal to the avowed objective of fighting poverty," writes Melville Ulmer of the University of Maryland about the Family Assistance Plan and all those of a similar type. [16, p. 94] The following proposal is, of course, of a similar type.

#### Income Maintenance Commission Proposal---

Last in a long series of family income-based plans for welfare reform is the proposal of the Commission of Income Maintenance Programs. The Commission proposed

- the creation of a uniform, nationwide, federally financed and administered income maintenance program based on a single criterion for eligibility, need, and
- the termination of federal participation in existing public assistance programs, with the phasing out of existing special food programs for the poor.

The recommendations make some comparison possible, but critical analysis is necessarily restricted because proposed legislation is lacking.



The program would be noncategorical, applying to all needy families, and also to couples without children and single individuals.

The basic income allowance for each adult would be \$750 and each child \$450, providing a 4-person family a \$2,400 basic income allowance. The "breakeven" amount would be \$4,800. By removing food stamps as a part of income support, the 50 percent negative tax rate remains uniform as family income rises. Table 3 illustrates how the Commission's proposal would operate.

Table 3.--Income Maintenance Commission proposal: Guaranteed income \$2,400, breakeven income \$4,000, 4-person family

a	b	c	d	e	f
Before-tax family income	Basic income allowance	Negative tax rates (percent)	Negative tax (a x c)	Cash payment (b - d)	After-tax family income (a + e)
\$ 0	\$2,400	50	\$ 0	\$2,400	\$2,400
500	2,400	50	250	2,150	2,400
1,000	2,400	50	500	1,900	2,900
2,000	2,400	50	1,000	1,400	3,400
3,000	2,400	50	1,500	900	3,900
4,000	2,400	50	2,000	400	4,400
4,800*	2,400	50	2,400	0	4,800

Note: Based on data in Report of the President's Commission on Income Maintenance Programs, Poverty Amid Plenty: The American Paradox (Preliminary copy, November 12, 1969), p. 122. Mimeo.

\* Breakeven income. Amount varies with family size.

Source: Family Income Maintenance: Some Options, a bulletin developed by the Extension Public Affairs Committee of the Southern Region, and being printed by the Extension Division of Virginia Polytechnic Institute.

This proposal is subject to a standard criticism--the minimum income level is too low. The Commission recognized both this criticism and reality in its comment that the \$2,400 basic allowance "... was not chosen because ... it is an adequate income, but because it is a practical program that can be implemented in the near future." [7, p. 17] Of an estimated \$6.0 billion cost, \$5.0 billion would go directly to impoverished families. Eligibility does not depend upon registration for employment or a requirement to accept training or suitable jobs.

To solve short-term emergency need, a new, locally-administered, noncategorical Federal-State program is suggested, which would be financed 50-50 by state and federal government, and would cost an estimated \$600 million annually.



Included among the many useful contributions of the Income Maintenance Commission is a series estimating the net program cost and the number of persons eligible for payments in 1971, at various payment levels.

Table 4.--Income maintenance cost estimates: Selected payment levels, with breakeven income, and population coverage, negative rate 50 percent

Payment at (0) zero income	Break- even income	Net cost* (billions)	Population coverage (millions)	
			Households	Persons
\$2,000	\$4,000	\$ 3.5	7.8	26.9
2,400	4,800	5.9	10.5	36.8
2,800	5,600	9.3	13.5	48.1
3,200	6,400	14.0	16.7	60.2
3,600	7,200	20.0	20.5	74.6
4,000	8,000	27.5	24.2	88.3

\* Cost estimate are net of offsetting savings in existing programs to all levels of government.

Source: Data are from the Report of the President's Commission on Income Maintenance Programs, Poverty Amid Plenty: The American Paradox.

A general criticism of family income-based proposals for welfare reform includes not only references to payment levels and features that are coercive in nature, but to tendencies that such programs have to benefit the poor only because they are poor without concentrating on removing the demeaning features---the very features upon which the eligibility of the recipient is based and the very features which make the administration of the programs efficient.

#### Children's Allowances

Among the industrial nations only the United States and Japan do not have children's allowances. These are "systematic payments made to families with dependent children, either by employers or by the government, for the primary purpose of promoting welfare of such children." [17, p. 2]

Normally all dependent children are eligible for payments until they reach a given age, say the 18th birthday. Payments may be continued for







students or sick or handicapped children. Thus, children's allowances are noncategorical. Eligibility is not determined by the marital status of the parents or by family income.

Children's allowances can be easily administered, a feature that makes them attractive. Such allowances are quickly criticized as encouraging an increase in births. However, research does not support such an argument, although it is important to understand that studies have been conducted in countries where the payment is relatively low.[18]

An array of proposals for children's allowances has been developed, and they have certain characteristics in common. The central issue concerns establishing a level of payment, and then deciding whether this rate of payment will apply uniformly to all children in a family or whether the rate of payment will change with the second, third or subsequent child.

It is also necessary to decide whether to have payments made under any children's allowance program subject to income tax. A broad range of effects occur when such payments are subject to income tax, and these will vary among families depending upon the amount of their taxable income. At present the \$600 personal exemption for each dependent child is a form of supplement for their support. But the effect is that the value of this exemption is worth more to those with high incomes and considerably less per dependent for families whose incomes are so low that they have no taxable income. The impact of payments under a children's allowance program could, in some cases, increase the taxes paid by families with higher incomes and provide higher incomes for families with medium and low incomes. Among these families some would pay more income tax if children's allowance were taxable, with the result being similar to a negative tax. The effective rate would, however, be considerably below the proposed 50 percent negative tax rate used with family-income based plans.

Children's allowances are an alternative that may gain in importance as the issues of welfare reform and poverty receive further attention. That a family would not need to declare need through any form of "means test" is an especially important feature of children's allowance. Obviously, only children are eligible for children's allowance, which means that single persons, childless couples of all ages, and the elderly would not be eligible for income support. So other programs would be needed.

Among many alternatives 2 will illustrate the possible range of proposals. One by James Vadakin of the University of Miami (Florida) would provide all children under age 18 an allowance of \$10 per month. Eligibility would be based on 2 factors--U. S. citizenship and satisfactory school attendance. To assure, perhaps as much as possible, the expenditure of allowance payments for the child, payment would go to the mother, for the care and education of the child. Benefits would be taxable and tax exemptions for dependents would be retained. This proposal has an estimated cost of \$7.3 billion.

A broad proposal for welfare reform that combines children's allowance with other programs is still being developed by Senator George McGovern. While not final, enough detail has been revealed to permit some comparison. Children in every family would be entitled, until an age yet-to-be specified, to payments of \$50 to \$65 per month. Payments would be subject to income tax,



and existing tax exemptions for dependent children eliminated. A family's income would be over \$25,000 before taxes cancelled out benefits from payments. With a \$50 payment per child, a 4-person family earning \$2,400 would have their income raised slightly above the poverty threshold. Women, who are heads of household and whose children have reached school age would not have to register for work, and 100 percent of any earnings would be retained for the family benefit. A family with 3 children and an income near \$7,000 would benefit after taxes by about \$1,200 per year. Presumably, the proposed children's allowances would be phased in over several years, with a cost of \$10 billion the first year, rising thereafter to " . . . a level close to that of our existing Social Security System,"[19, p. E384] a statement subsequently interpreted to mean \$20 to \$25 billion.

The McGovern proposal will have a cost approaching \$35 billion when ; yet-to-be-revealed guaranteed employment feature is added.

### Guaranteed Employment

The goal of guaranteed employment is to create jobs that furnish work opportunities and produce needed public facilities--schools, roads, hospitals, parks and libraries are examples. Guaranteed employment programs have merit and gain support because their cost

- produces useful facilities and services,
- develops skills that untrained or unemployed persons can transfer to other jobs, and
- provides both the individual and society benefits by allowing services to be furnished in return for income support.

Sometimes wage subsidies are combined with guaranteed employment programs. These subsidies recognize that during the early stages of training a worker who has no skills or who is learning an entirely new skill may not produce at a level that justifies the minimum wage. When such subsidies are used, care must be exercised to see that they do not become the equivalent of a subsidy to the employer, rather than income support for the individual.

Because meaningful work can seldom be produced in every community, guaranteed employment programs are often criticized for a lack of flexibility. This feature should not be used to deny their consideration, as guaranteed employment is a type of program where compromises can develop between those who support the cash transfer type program with a minimum of restraint and those who support only the principle of work. Consequently, if welfare reform is to become a reality acceptable to the several interested parties, especially individuals seeking to acquire worth and achieve human dignity, effective employment programs are entitled to serious consideration.

A recent proposal directed toward economic stability and incorporating a guaranteed employment program has recently been proposed by Melville Ulmer.[16] Within recent decades, stable prices have been associated with an unemployment rate near 7 percent. Providing jobs for all persons wanting to work and lowering the unemployment rate to 2 percent, while maintaining price stability,



is the objective of this proposal. It " . . . would displace some seventy uncoordinated job training programs now sponsored by the federal government. It would also displace a variety of other 'anti-poverty' projects and would reduce substantially the amount of unemployment insurance benefits, public assistance, and other relief payments that are presently required."[16, p. 165]

A single agency would be established to handle employment. It would maintain a continuous inventory of job opportunities and of unemployed persons. Employers would be required to report job openings, but employers would be free to hire from any source. Employment opportunities would include on-the-job training in industry, on-the-job training with state and local government, or on-the-job training and basic education with the agency, which would maintain some employment opportunities under its own control to provide continuous access to work for those needing employment.

A basic premise of this guaranteed employment program is that the lack of skills by potential workers causes their unemployment. Further, that increasing government expenditures to lower unemployment levels causes inflation when the supply of skilled workers is exhausted. To bring stability into the economy the unskilled would be employed. To prevent this employment from itself creating inflation a refundable tax program, which could be applied to reduce or increase the purchasing power in the economy, would be introduced. Prices would be placed under continuous review by industry boards established to review and maintain appropriate price relationships.

This proposal is designed to reduce the unemployment rate to 2 percent by placing in productive work the individuals that are normally unemployed when price stability exists. Estimates place the loss of output at such unemployment rates at \$65 billion annually. This guaranteed employment proposal would produce an output of perhaps \$50 billion for an estimated " . . . net cost to the taxpayers of some \$5 billion."[16, p. 165]

This proposal, like other guaranteed employment programs, is entitled to a careful review. A comprehensive program that embodies the principle of work with institutional renewal for the purpose of economic stability, while contributing significantly to welfare reform, should not be quickly dismissed because it proposes some new ideas in institutional design.

### Conclusion

Our existing welfare policies conflict with our principles of work, social responsibility, and equality of opportunity.

Our concept of entitlement will remain work related, and it will be necessary to broaden our view of property to include the human capabilities that result from basic education, and the acquisition of skills and craftsmanship.

Numerous dilemmas and complexities are involved with welfare reform. As is evident in this presentation, no single proposal for welfare reform will resolve existing problems. But whatever the eventual choice, an essential element will be an administrative framework that places program



responsibility with precision and applies the funds expended in a manner designed to solve the problem, not perpetuate it.

The principles of our society are compelling us to implement a policy designed to achieve reform. In so doing, the necessary task becomes clear, if we view the issues as an American problem and not a problem of the poor.







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Summary of a Speech by  
J. Paxton Marshall, Virginia Polytechnic Institute  
at the  
National Agricultural Outlook Conference  
Washington, D. C.

February 19, 1970

"Our existing welfare policies conflict with our principles of work, social responsibilities, and equal opportunity." Dr. J. Paxton Marshall also told the National Agricultural Outlook Conference in Washington, D.C., "disincentives to work toward self support surround the existing welfare programs."

Dr. Marshall, of Virginia Polytechnic Institute's Extension Service, pointed out in outlining possible alternatives to present welfare programs, "No single proposal will resolve existing problems." However, reforms ought to be designed to solve difficulties, not perpetuate them.

Dr. Marshall detailed three presently debated kinds of welfare activities: family-income-based programs, children's allowances, and guaranteed employment.

Family Income-Based Proposals give families on welfare strong work incentives. Recipients would be eligible for payments until they earned a stated amount, called the "breakeven" amount. They would not be penalized dollar for dollar for what they earned; however, payments would taper down as the "breakeven" amount was approached.

Children's Allowances are programs that would provide systematic payments to all families with dependent children, either by employers or by the government.

Guaranteed Employment Programs gain support because they produce useful services and facilities, develop skills that can get people out of the poverty cycle, and allow welfare recipients to return services to society.

In conclusion, Marshall said, "The principles of our society are compelling us to implement a policy designed to achieve reform. In doing so, the necessary task becomes clear, if we view the issues as an American problem and not a problem of the poor."



UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

OUTLOOK FOR TOBACCO

Talk by

Robert H. Miller and Johnny D. Braden  
Economic and Statistical Analysis Division  
at the National Agricultural Outlook Conference  
Washington, D.C., 9:15 A.M., Thursday, February 19, 1970

The tobacco outlook for 1970 is highlighted by prospects for tobacco use to total near last year's level. This will mean another reduction in carryover. Growers will probably harvest about the same tobacco acreage this year as last. Price supports will go up 4.3 percent, so last year's level of cash receipts can probably be maintained.

Tobacco Products

Cigarettes take four-fifths of tobacco used in the United States. Cigarette output totaled about 560 billion last year--20 billion below 1968's record level. The number of cigarettes smoked per capita, 18 years and over, in 1969 was about 4,025 (201 packs), some 4 percent below 1968. Even though per capita use is declining this year U.S. smokers (including overseas forces) may smoke the same total number as in 1969 or slightly fewer.

Retail cigarette prices rose 5 percent in 1969, due to increases in State and local taxes and higher wholesale prices. Further price increases are likely, reflecting tax hikes again this year. State excise taxes currently range from 2 to 15 cents per pack.

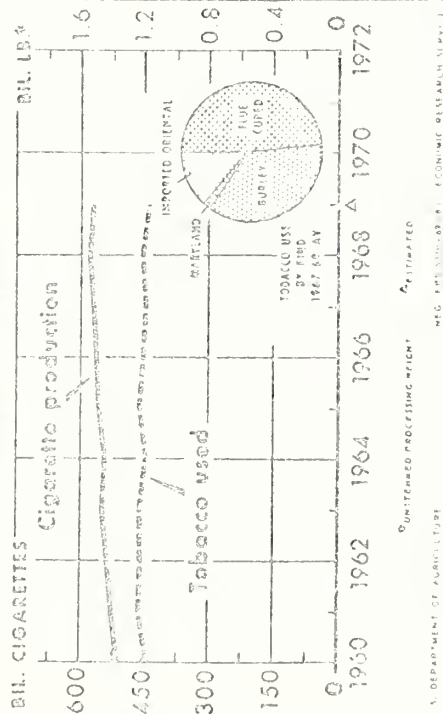
More people are of smoking age and incomes are at record levels, but cigarette consumption in 1970 could turn down further because of retail price increases, intensified smoking-health publicity, and slower economic growth.

The U.S. House and Senate have each passed new cigarette labeling and advertising legislation and a Senate-House conference has to resolve the differences. Both bills extend the moratorium over actions by individual States against cigarettes and strengthen the health warning on cigarette packages. The Senate-passed bill would prohibit cigarette advertising on radio and TV after January 1, 1971, and allow the Federal Trade Commission to require the health warning in printed media after July 1, 1971, or sooner, if the FTC determines that cigarette manufacturers are substantially expanding advertising in newspapers, magazines, and billboards. The House-passed bill contains no provision on radio and television advertising and the moratorium over Federal agencies is extended until 1975.

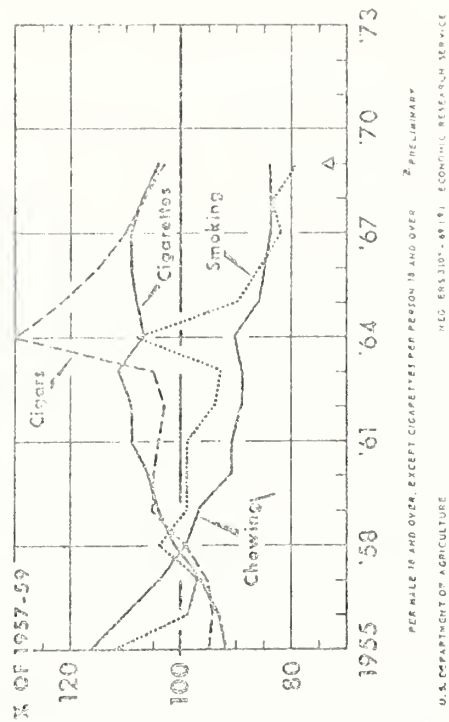




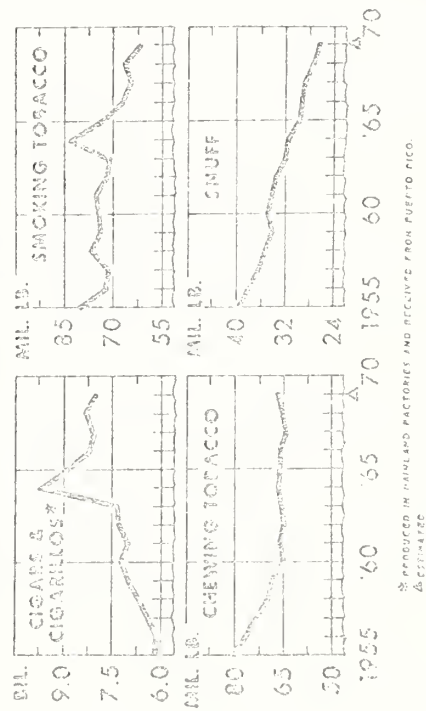
# CIGARETTES: PRODUCTION AND TOBACCO USED



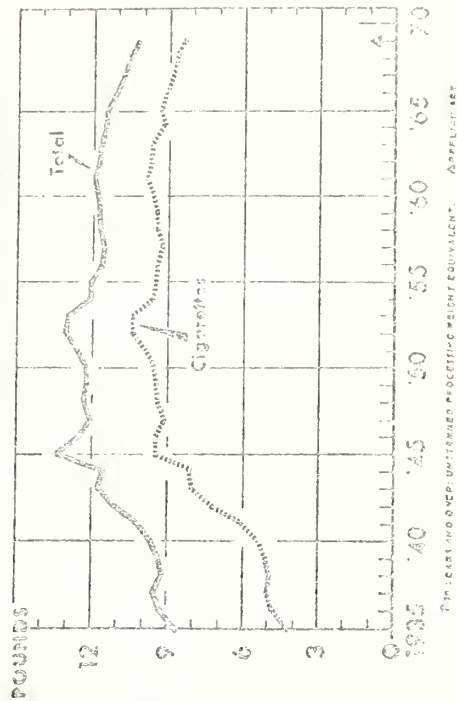
# PER CAPITA CONSUMPTION OF TOBACCO PRODUCTS



# U.S. OUTPUT OF TOBACCO PRODUCTS



# TOBACCO CONSUMPTION PER PERSON\*





Since about the mid-1950's manufacturers have reduced the average quantity of tobacco in a cigarette by 2 percent a year. The increased use of midribs of leaves and sheet tobacco, the shortened tobacco column of filter-tip cigarettes, and the decrease in cigarette circumference are major factors. Freeze drying and puffing processes, now in the experimental and market testing stages, may reduce the tobacco per cigarette even further in the next few years.

The production of U.S. and Puerto Rican cigars-(including cigarillos) last year dropped 4 percent to about 7.9 billion. U.S. consumption was about the same as in 1958 but about 13 percent below 1964. Consumption per male 18 years and over was around 125 cigars, 1 percent below 1968. Total cigar consumption this year is expected to be near that of 1969. But the emphasis on smaller cigarillo types means less tobacco per cigar.

The 1969 output of smoking tobacco for pipes and roll-your-own cigarettes fell to 64 million pounds--a new low. Production was 4 percent below 1968. Further declines in output and sales may occur in 1970.

Output of chewing tobacco was 70 million pounds last year, 7 percent above 1968. Output has remained fairly stable since 1960. Increases in scrap and fine-cut chewing have about offset decreases in plug and twist. Snuff production steadied last year. Except for scrap chewing tobacco, per capita use of these products is expected to continue downward in 1970.

#### Foreign Trade

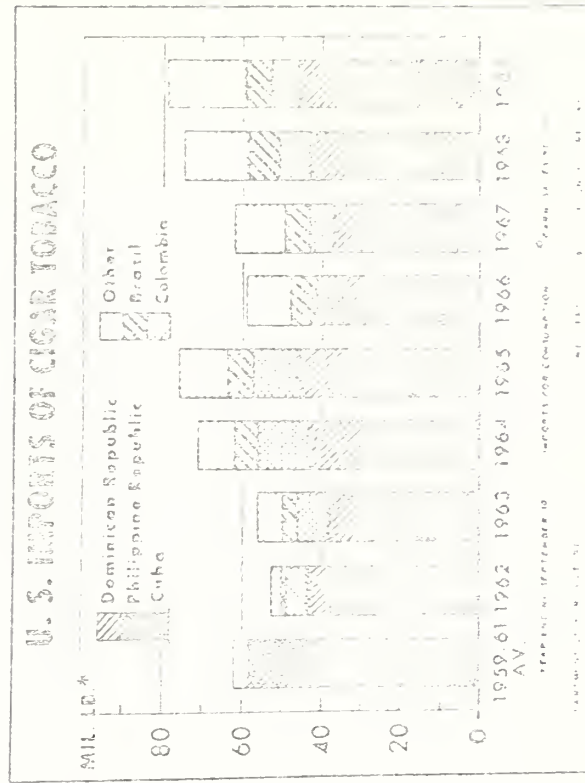
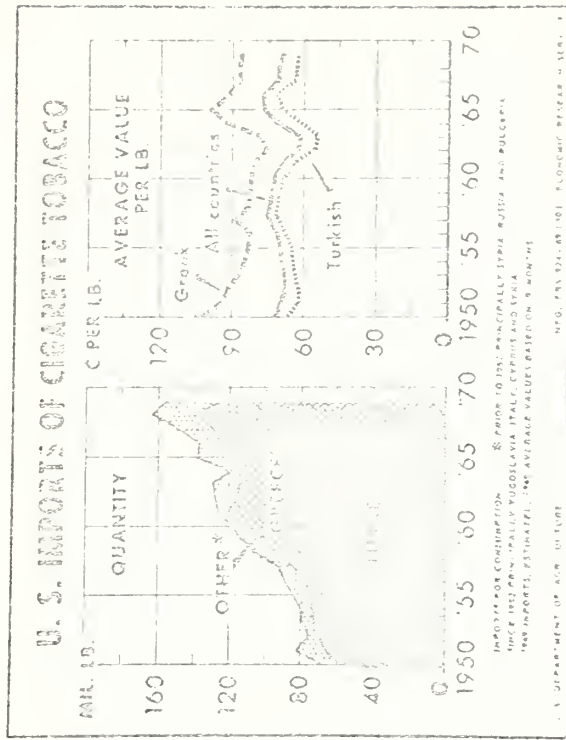
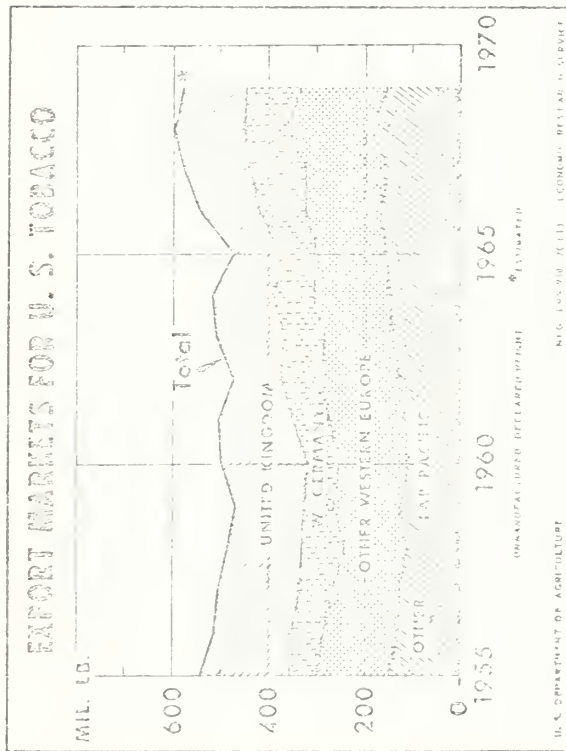
The value of U.S. exports of tobacco and tobacco products in 1969 amounted to a record \$696 million in 1969, an increase of 1 percent over 1968. Volume fell below year-earlier levels, but unit values rose. Unmanufactured tobacco exports last year reached a record \$540 million and tobacco products shipments were valued at \$156 million. In recent years leaf and product exports represented about 40 percent of the U.S. tobacco crop.

U.S. exports of unmanufactured tobacco in 1969 totaled 577 million pounds (657 million, farm-sales weight)--4 percent below 1968's 22-year high. Last year West Germany took more tobacco than in 1968, but the United Kingdom took less. Several countries in Asia and Oceania also took less.

U.S. exports in 1970 will continue close to the 1969 high level, assuming the U.S. sanctions against Rhodesia continue. Both the high quality of the recent flue-cured crops and the U.S. export payments help U.S. exports. Also, world cigarette production is still expanding rapidly and the demand for light tobaccos for blending--primarily flue-cured and burley--is on the upswing. However, larger foreign crops, higher U.S. prices, and expanded production of higher quality tobacco by several heretofore minor exporters in Latin America, Africa, and Asia increase the competition in foreign markets.

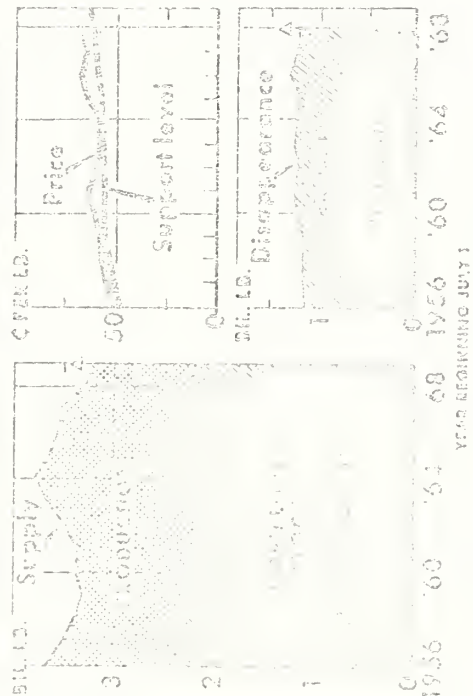
The largest market area for U.S. tobacco is Western Europe, and its total imports of unmanufactured tobacco have gained 2-3 percent annually in the 1960's. But shifts among suppliers are important and the European Community and U.K. preferential arrangements can adversely affect exports of countries outside these groups. In other markets where population is growing more





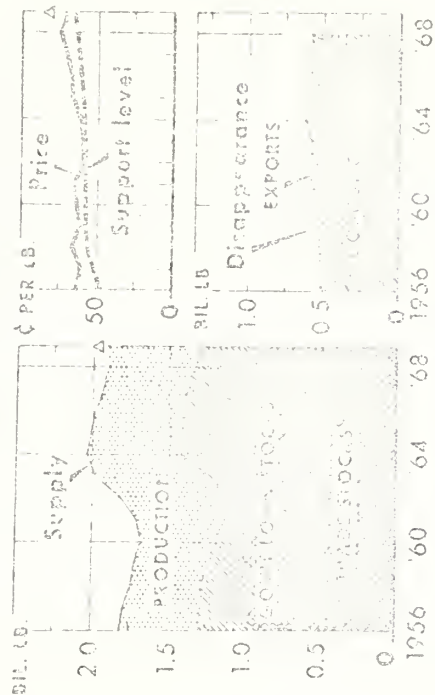


# PIPE-CURED TOBACCO: SUPPLY, PRICE, USE



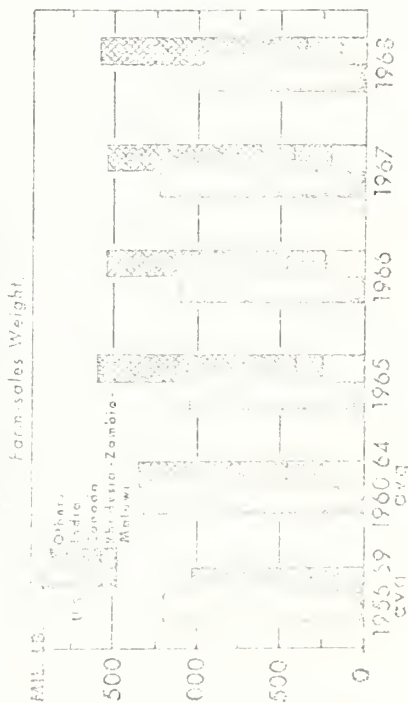
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 MANUFACTURES AND DEALERS  
 YEAR BEGINNING JULY 1  
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 NEG. ERS 321-6516 ECONOMIC RESEARCH SERVICE

# PIPE-CURED TOBACCO: SUPPLY, PRICE, USE



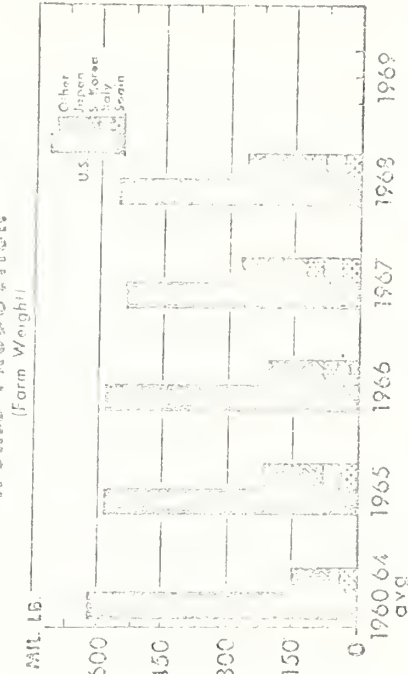
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 YEAR BEGINNING OCT 1  
 A PERCENTAGE INDICATOR

# PIPE-CURED TOBACCO: ESTIMATED PIPE WORLD PRODUCTION



U.S. DEPARTMENT OF AGRICULTURE  
 NEG. ERS 321-6516 ECONOMIC RESEARCH SERVICE

# PIPE-CURED TOBACCO: ESTIMATED PIPE WORLD PRODUCTION



U.S. DEPARTMENT OF AGRICULTURE  
 NEG. ERS 321-6516 ECONOMIC RESEARCH SERVICE







rapidly and per capita income is rising. Leaf use is gaining at a faster rate, but the demand is more limited for the higher priced U.S. supplies.

The United States is the third largest tobacco importing country because of demand for certain kinds of foreign tobacco for blending with domestic types in the manufacture of cigarettes and cigars. Oriental cigarette leaf is the principal kind of import. Imports for consumption (factory use) last year were off about 19 million pounds to 143 million pounds--a decline of 12 percent from 1968. In addition 10 million pounds of oriental scrap and 4 million pounds of imported flue-cured and burley leaf were used last year.

Cigar tobacco imports are mainly filler tobacco including scrap. The Philippines is the leading source. During October 1968-September 1969 importers brought in 79 million pounds (turn-out weight) for consumption, up 4 million from a year earlier.

Imports for consumption accounted for about 16 percent of domestic tobacco utilization last year. This high level of factory use will probably continue due to large foreign stocks in the United States and substantial exportable supplies overseas. Costs of U.S. and oriental leaf for cigarettes are similar, but oriental scrap carries a much lower value than leaf.

### Leaf Tobacco

The U.S. tobacco crop in 1969 was 5 percent larger than the previous year's 11-year low. Smaller carryovers have reduced supplies available for the 1969/70 marketing year 3 percent. Flue-cured prices set records, but the burley market weakened and growers put less tobacco under loan during the 1969 season. Prices for the season averaged 3 percent above the 1968/69 level.

Government price support is mandatory for the kinds of tobacco produced under a marketing quota. The 1970 crop price support levels for eligible tobacco will be 4.3 percent higher than in 1969. The increase results from a rise in the parity index (a measure of changes in prices paid to farmers, wages paid to hired labor, interest, and taxes).

As the result of the smallest carryover since 1962, the supply of flue-cured tobacco is 145 million pounds below 1967/68 season. Growers sold 55 million pounds more than in 1968, when the smallest crop in the 5 years of acreage-poundage quotas was produced. Many growers increased acreage in 1969 because they did not reach their quota in 1968.

The 1969 flue-cured crop sold at record prices, averaging 72.2 cents per pound--5.7 cents above the previous season. Best prices average were higher and quality was the best in several years. One acre placed 9.6 percent of market deliveries under government loan. In the 1968 season 13 percent of market deliveries went under loan.

Last marketing year, exports of flue-cured (over four-fifths of total U.S. tobacco exports) were 2 percent below the previous season and domestic use was also down. Exports for July-December 1969 were 7 percent over a year earlier.



(farm weight). If last year's disappearance of 1.2 billion pounds is matched in 1969/70 this would bring the mid-1970 carryover of flue-cured down 7 percent to about 1.95 billion pounds.

For 1970, the national flue-cured marketing quota is 1,071 million pounds--down 5 percent from 1969. But undermarketings for the 1969 crop exceeded overmarketings, so the base quota plus net undermarketings gives an effective quota of about 1,206 million pounds, 1 percent above 1969.

The 1969/70 supply of burley tobacco is fractionally above the previous year but 7 percent below the 1964/65 peak. Carryover on October 1 was about 1 percent less than a year earlier. Growers sold 3 percent more burley this season. The 1969 crop averaged about 69.5 cents a pound--down 4 cents from 1968. With the weaker market, loan placements at 27 percent of the crop rose sharply from the 1968 season, when 10 percent went under loan.

Burley exports gained in 1969 but domestic use slipped some with lower cigarette output and a jump in Maryland tobacco use. Despite relatively low Maryland supplies, with the same or lower cigarette production in 1970, domestic burley disappearance may not change much. So carryover stocks next October 1 will probably be near this season's ample level.

Burley yields have been trending upward, reaching a record high last year. USDA cut this year's acreage allotments 10 percent on all farms not protected by minimum provisions, so the crop should turn out smaller. This would reduce the supply in 1970/71 a little from this year.

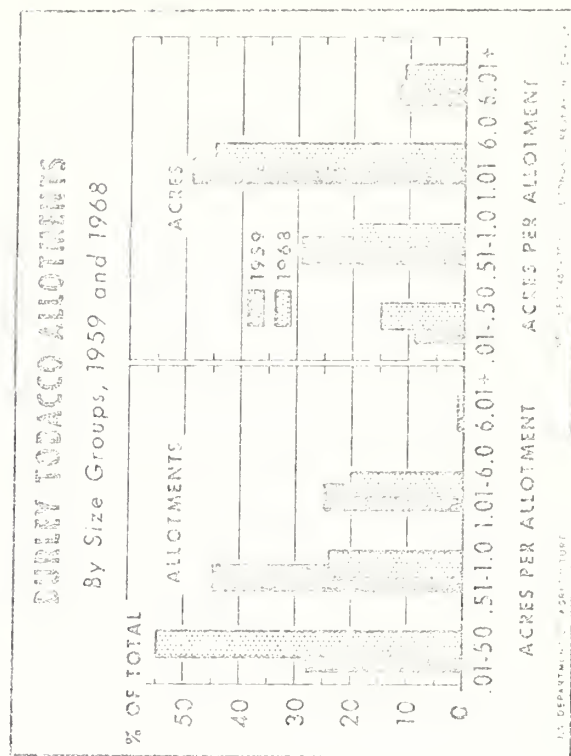
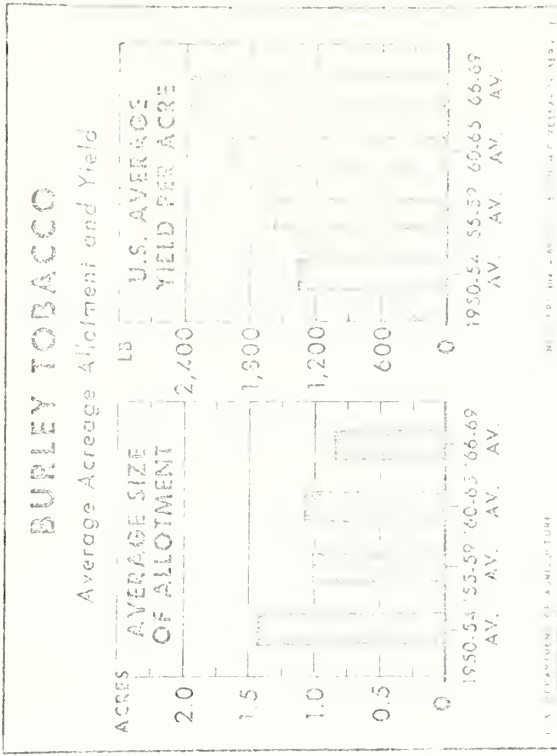
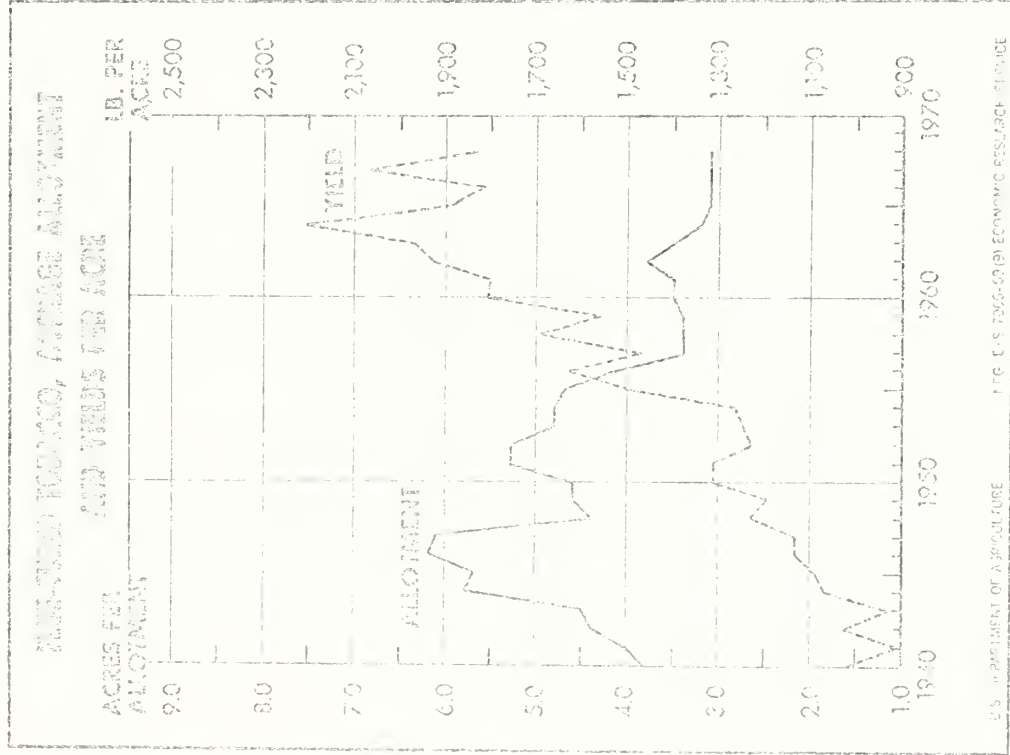
For other tobaccos the current marketing year's supplies of fire-cured, Maryland, cigar filler, cigar liner, and shade-grown cigar wrapper are smaller than last season, while dark air-cured increased slightly. Marketing quotas and acreage allotments for these tobaccos under support were announced last month.

#### Larger Range Tobacco Production Prospects

For the last 5 years tobacco production averaged below output in the early 1950's. In contrast, most other farming enterprises gained over the past 2 decades. Despite the decline in tobacco production, the ingredients of tobacco production have undergone great and to some extent compensating changes over the years. The 2 components of production--acres and yield per acre--moved in divergent patterns--at least prior to 1965 for flue-cured tobacco. Since then the average yield per acre has stabilized.

The late 1950's marked an important turning point for tobacco growing. Following a series of acreage allotment cuts and the pressure to maintain farm income, growers adopted new practices and technology that increased yield per acre. Higher rates of fertilization; higher yielding and improved varieties; better disease, insect and snaker control; higher topping, and closer spacing are important changes that increased yields. More formal education, extension activities, improved transportation, and communication have resulted in a more knowledgeable group of producers than some years ago.









Farmers' responses to allotment changes, price, and other considerations are important in estimating the effect of program changes as well as in determining the long-run economic outlook for tobacco production. With acreage allotments, farmers respond by deciding to grow their given allotment including leased acreage, and then they try to obtain a high yield per acre. The acreage-poundage modification for flue-cured tobacco shifts the emphasis from maximum yields to maximum net income with a given poundage quota. Beside allotments and quotas, rising production costs, more attractive off-farm opportunities, large labor requirement, and difficulty in obtaining harvest labor serve to limit tobacco production in many areas.

Tobacco acreage data for the past 2 decades were studied. Since abandoned acreage is usually quite small, harvested acreage approximates planted acres.

Acreage allotments rather effectively set the upper limit on acreage. Excess acreage for harvest is usually negligible in view of the overquota marketing penalty (75 percent of the previous year's average price). Thus, harvested acreage can be estimated directly, or the underplantings estimated and the harvested acreage derived.

During 1956-58 and then since 1966 some tobacco allotments have been idled under land retirement programs. The acreage reserve provision of the Soil Bank, operated in the earlier years and with the exception of burley, growers placed significant percentages of allotments under the program. The Cropland Adjustment Program (CAP) allowed farmers in 1966 and 1967 to place the farm allotment into protective conservation use for 5 to 10 years. Growers placed only about 1 percent of burley and flue-cured allotments in CAP, but the participation rate was much larger for other kinds.

After allowing for land retirement programs, underplantings for flue-cured tobacco were generally less than 2 percent of allotment before 1965. In the past 5 years when marketings averaged 5 percent below quota the underplantings averaged  $6\frac{1}{2}$  percent, partly because, unlike prior acreage allotments, growers using the acreage-poundage program can make up undermarketings with the following crop. The degree of underplanting during 1965-69 varied more from year to year than earlier data, and did not show any apparent trend, nor seem related to flue-cured prices, yield per acre, or change in allotments. One hypothesis is that underplanting is influenced by profit incentive.

Based on this hypothesis, the relationship of underplantings and the deflated price (actual price divided by prices-paid index tobacco farms, Coastal Plain, North Carolina) indicates underplanting tends to decrease as the real price of flue-cured tobacco rises. Based on the 1969 average prices to growers and the prices-paid index the underplanting in 1970 will be at least as large as the average of the past 5 years. With about 1 percent of acreage in CAP, the gross underplantings could be 7-8 percent of effective acreage allotment.

In burley tobacco the underplanting has been 3-5 percent of allotments for the past decade with little trend. Unlike flue-cured allotments under acreage-poundage, burley underplanting cannot be added to the following year's allotment.





For fire-cured, dark air-cured, and cigar types under allotment, underplantings run up to 50 percent or more, in part because of large participation in land retirement, lower market prices than for flue-cured and burley, and cash costs per acre nearly as large. So the relationship to price and alternative cost seems a reasonable way of forecasting acreage harvested.

For flue-cured and several other types of tobacco, the opportunity since 1962 for lease and transfer of allotments within a county has meant an active market for allotments that might otherwise be idled, or not used as efficiently. Many farmers rent additional acreage to be produced on the land of the allotment owner. As long as rent for allotments exceeds the net return from other crops, the difference between harvested acres and allotment is likely to be small.

Under the lease and transfer program, the average rental rate per pound of flue-cured marketing quota declined from 17 cents in 1966 to around 13.5 cents in 1969, according to North Carolina State University. Rising production costs, including wages and carryover of undermarketings tend to reduce the rate. Rates tend to be higher in counties where tobacco is important and lower on the fringes of major production areas. Wider transfer of allotments across county and State lines has been proposed, but even under present authorization transfers are likely to increase as tobacco farming becomes more affected by changes in other parts of agriculture and outside agriculture.

#### Transfer of allotments, 1969 crop <sup>1/</sup>

Type	Allotments leased and transferred out			
			Percent of:	Percent of:
	Farms	Amount	total	harvested
			allotment:	acres
	Number	Acres	Percent	
Flue-cured, 11-14 <sup>2/</sup> <sup>3/</sup>	66,842	131,819	20.7	24.7
Fire-cured, 21	779	949	9.2	19.4
Fire-cured, 22-23	3,452	4,243	15.7	22.4
Dark air-cured, 35-36	2,753	1,373	10.9	13.5
Va. sun-cured, 37	77	94	3.7	8.5
Cigar binder, 51-52 <sup>2/</sup>	16	71	1.2	4.4

<sup>1/</sup> Includes sale, lease, and owner transfers. <sup>2/</sup> Annual lease only. <sup>3/</sup> Preliminary.

Compiled from data of Agricultural Stabilization and Conservation Service, USDA.

For burley, the major type without lease and transfer, an important consideration in allotment changes and future production is allotment size distribution. While the average burley allotment has been less than 1 1/2 acres since 1950, the proportion of allotments of one-half acre or less has declined



in the past decade. The average allotment was .88 an acre last year; in terms of allotment numbers, 55 percent are one-half acre or less and under present law cannot be reduced further. These allotments represent about 25 percent of acres allotted. So this size distribution is important in considering allotment changes as well as in grower referendums.

Besides acreage, yield per acre is the other determinant of production. Yield is affected by weather. Growers have applied new technology to boost yields. The reduction of uncertainty due to government price supports and allotments tends to offset acreage limitations. Fertilizer application has increased sharply, while fertilizer prices have been steady or declining. Farmers tend to maintain fertilizer applications at the most recent level or increase applications as long as the crop will respond.

Rather clearly the flue-cured yield pattern shifted after 1964 under the acreage-poundage control program. The upward trend has been stopped and yields have stabilized around the national yield goal of 1,854 pounds per acre. On the other hand, burley yields have continued to rise, and the estimated yield of 2,450 pounds last year is an all-time high. The average gain over the past decade was 4 percent annually.

Burley yields by States in 1968 varied from 1,695 pounds per acre in West Virginia to 2,520 pounds in Virginia. Yields in some Kentucky counties average 20 percent above the Statewide average, and research plots yield up to 5,500 pounds per acre. With numerous small allotments for burley, a great many operators decide on what practices to follow. Probably most operators will strive to boost yields and the average will continue increasing. If the trend continues, further acreage cuts will be needed to adjust supplies to the level specified by legislative formula.

After 1970, the long term outlook for tobacco production will reflect many of the influences that affected it during the Sixties. Though the magnitude of future developments is uncertain, recent trends have not run their course. For several years, U.S. tobacco consumption will be held down or reduced by the smoking-health controversy and manufacturing efficiencies. On the supply side, farm wages have increased at an average rate of about 10 percent per year since 1965. This trend, along with the shortage of seasonal labor is likely to continue. Some additional mechanization will occur on larger acreages, but this will probably still have only a minor effect on overall supply over the next few years. So these factors will ensure continued pressure for change by tobacco growers.























UNITED STATES DEPARTMENT OF AGRICULTURE  
Economic Research Service

WHERE WILL NEW JOBS BE DEVELOPED?

Talk by Jerry B. Waters  
Administrative Assistant to Senator James B. Pearson  
at the 1970 National Agricultural Outlook Conference  
Washington, D.C., 10:00 A.M., Thursday, February 19, 1970

I will not pretend to offer a definitive answer to the question posed by the assigned title of this paper, "Where Will New Jobs Be Developed". But I want to begin my comments by quoting a highly significant, indeed possibly historic, statement from President Nixon's State of the Union Message. In that portion of the statement dealing with the need for a national population growth policy, the President declared, "We must create a new rural environment that will not only stem the migration to urban centers but reverse it".

If this presidential imperative is to be realized, then the general answer to the title of this paper is obvious; adding a net urban out-migration factor to the inevitable growth in the total population, will necessarily require the creation of many millions of new jobs in rural America over the next two or three decades.

That particular sentence from the President's message could be given a number of interpretations. However, I think it is apparent from the various statements and actions by the President and Cabinet officials that the Nixon Administration is quite serious about trying to alter present population distribution trends, which, if left unchecked, will probably result in 60 percent of our people piling up into four giant strip cities by the year 2000.

But, as any student of politics knows, there is no inevitable connection between a declaration of general intent and concrete, meaningful action. Whether or not a successful beginning is made will depend not only on the vision, the skill, and the dedication of the Nixon Administration, but also, of course, on the degree of public interest and political support for the general cause of rural development. I believe that considerable support does indeed exist and I want to make a few brief comments about it.

The Great Depression of the thirties, among other things, caused some observers to give pause, to ponder the desirability of uncontrolled urbanization. These concerns were shouldered aside by World War II, but by the latter part of the forties and early fifties an increasing number of urban experts warned that our cities were headed for serious trouble. By the late fifties and early sixties an increasing number of the nation's political and opinion leaders began to pay heed and the term "crisis of the cities" became commonplace.



But all these discussions of the problems in the cities were focused entirely on the question of how to equip them better to service the millions of new people who would inevitably continue to flock into them.

However, within the past three or four years a new questioning of old dogmas has occurred. As Senator James B. Pearson said when he introduced the Rural Job Development Act in 1967, "in our efforts to deal with the crisis of the cities we have come to realize that the challenge is not simply to make them more efficient and livable for more and more people, but how to keep more and more people from crowding into them. For we are beginning to realize that the cause of many of the problems which now plague our cities can be traced to the overcrowding of people and the excessive concentration of economic resources".

From 1966-67 to the present a large and impressive number of Congressmen from both parties, from all regions of the country and from urban as well as rural constituencies have urged the necessity of stemming the rural to urban tide.

During his last three years as Secretary of Agriculture, Orville Freeman spoke frequently and effectively on the need to achieve a better rural-urban balance and gave renewed emphasis to rural community development efforts in the Department.

The President's National Advisory Commission on Civil Disorders pointed to the need to slow the rural to urban tide. And the Advisory Commission on Intergovernmental Relations issued a solid plea for rural-urban balance.

The 1968 National Governors' Conference declared in somewhat exaggerated language that "population imbalance is at the core of nearly every major social problem facing our nation today", and called upon the Congress to adopt a policy aimed at bringing about amore even distribution among the nation's people.

Opinion leaders like J. Russell Wiggins, editor of the Washington Post, and John Fischer, editor of Harpers Magazine, along with small town editors across the country added their editorial endorsement to the theme of helping solve the problems of the cities by expanding economic and social opportunities in the country.

All of this is not to suggest that the nation is about to be caught up in a wave of rural fundamentalism which will lead to a dismantling of our cities and a return to the farm and the village. However, it does suggest that across the political and geographical spectrum there is a growing concern that the distribution of our people is becoming dangerously and unnecessarily tilted toward the megalopolis and away from the small community.

It is significant that the rural development movement has its origins in and continues to draw support from the growing concern over the crisis of the cities. Adding this to the strength of rural interests means that the potential support for rural development initiatives is considerable, but, even so, the







efforts to translate this support into concrete results will involve the policy making process in a great number of issues and conflicts and will engage the attention of policy makers for a good number of years. And it is still too early to predict the outcome with any certainty.

It is not my intent here to submit a laundry list of possible rural development policies. However, I want, first, to suggest a rough classification of possible policy approaches and, second, to identify some of the issues and conflicts with which the policy makers will have to deal.

One may divide the basic policy approaches into at least four categories. First of all, we can seek to alter population patterns by command. That is, we could adopt a policy approach whereby governments (at federal, state, and local levels) through a system of licenses, tax penalties, or simple edict could very closely regulate the location of industries and the movement of people. As this smacks of authoritarianism I could anticipate very few examples of this type of approach and then only more or less as a last resort.

A second policy approach involves a deliberate alteration of the present pattern of government spending and location of government projects. President Nixon alluded to this approach when he said, in his State of the Union Message, "In the future decisions as to where to build highways, locate airports, acquire land or sell land, should be made with the clear objective of aiding balanced growth". Other examples involve the use of a geographic factor in the awarding of small business defense contracts, the allocation of research and development grants to colleges and universities, the location of government buildings and indeed almost any form of government economic activity.

The third policy approach involves the use of various types of aids and subsidies to state and local governments to make possible community development efforts that otherwise would not likely be undertaken.

Examples of these types of policies are numerous and range from grants for the expansion of a city's water and sewage system needed to serve a new industrial plant, to technical planning assistance, to loans and grants for new housing, to aid for vocational training programs, to subsidies for improved health service, to aids for recreational facilities.

A fourth policy approach involves government inducements to private entrepreneurs aimed at encouraging new-job creating industries to locate in rural areas. These could vary from liberal credit, to tax incentives such as income tax credits for capital investment and manpower training and accelerated depreciation, to actual cash subsidies.

There are already many of these third and fourth category type programs on the books and administered by such agencies as the Farmers Home Administration, the Rural Electric Administration, the Economic Development Administration, the Small Business Administration, and the Federal-state regional commissions. The assumption here is that their use and effectiveness would have to be greatly increased if we are to move forward with a new rural development effort.



Now let me turn to an identification of some of the issues and conflicts which policy makers will have to deal with as they begin seriously to come to grips with the task of adopting new programs and strengthening old ones aimed at affecting the distribution of jobs and people.

As I haven't developed a schematic model for classifying this part of the discussion, I would simply start by raising the very basic question; how, in fact, should you go about expanding the quantity and quality of jobs in rural areas? A number of policy questions immediately come to mind.

For example, should the government emphasize the role of private enterprise or should it concentrate its efforts primarily on the public sector? This is, do you offer aids and subsidies primarily to local governmental units for the purpose of developing their public facilities by which they can better equip themselves to attract and support new industry, or do you approach it from the other direction and put the primary emphasis on inducement to private entrepreneurs to locate in rural areas?

The two approaches are not mutually exclusive, of course. New policy inputs will probably occur in each category but again you are confronted with a series of questions such as: Should the inducements to private capitalism be in the form of, say, tax incentives or cash grants? In regards to aids to governmental units what should be the priority, for example, among programs for housing, water and sewage, education facilities, health services, or recreational facilities?

Beyond the question of reaching an accommodation of what is the most acceptable mix of policy instruments of the type we have just referred, the policy making process will have to come to grips with a very fundamental question of whether the rural development efforts should be concentrated or broadly dispersed geographically.

For example, should new rural development efforts be concentrated primarily in poverty areas or made generally available throughout rural America? There will be considerable pressure to limit new program efforts to poverty areas. First of all, the volume of out-migration is generally the greatest from poverty areas. Therefore, it will be argued that the quickest way to reduce the flow of people into the cities is to concentrate development efforts in these areas. Secondly, there will be considerable resistance to the offering of special programs to rural communities which, by most economic indices, are relatively well off.

My own view here, is that it would be a tragic mistake if the rural development movement got bogged down in simply an anti-poverty effort. The rural development movement must, by definition, deal with the problem of poverty, but it will fail to realize its great potential if it becomes entrapped in a constrictive anti-poverty syndrome.

But even if the rural development movement becomes something more than a narrowly defined anti-poverty effort, the policy makers will still be



confronted with the question of the concentration versus dispersion of development programs. For example, should the various community development tools be concentrated primarily in areas identified as potential growth centers or should they be made available in a general way, leaving to the free play of private enterprise and the interaction between towns and cities the question of which communities will develop their economic base?

As with all such questions the answer doesn't have to be of the either/or type, but certainly many will argue that the new program increments should be concentrated primarily in selected growth centers. And this argument will certainly be opposed by those who doubt our capacity to distinguish with any certainty between growth centers and non-growth centers and also by those policy makers whose constituencies would not likely qualify as growth centers.

This issue of concentration versus dispersal of governmental aids can also be illustrated by the new towns approach. The policy makers, for example, could decide to put all their eggs in one basket and devote virtually all new population distribution efforts to the construction of new towns.

They will not do so, of course. Indeed, even though the idea of new towns has considerable appeal at first glance, I very much doubt that it will ever play a major role in the rural development movement. Its greatest potential, I believe, lies primarily in redistributing population within or close to existing metropolitan areas. I rather imagine we will see the development of a number of new towns like the one planned on the outskirts of Minneapolis and other satellite cities like Reston and Columbia. But while such new towns have extremely important functions I don't think they have much of a relationship to the overall rural development question.

In addition to types of policy debates which will occur over the issues I have identified above, I want now to mention three other factors which I would characterize as potential drags on the rural development policy making process.

The first is the fact that the information base on which to construct rural development policy is not very good. We really don't know as much as we should about the whys and wherefores of economic growth and how government can best affect it. Our inventory of relevant economic and social data on rural America is very limited. In short, a very large gap now exists between the desire of a significant number of policy makers to move forward with new rural development policies and the technical information base on which to build those policies. This informational gap will be narrowed only with a great increase in research over a period of years. Out of this research will also come some sorely needed new policy ideas.

The second factor is the strong aversion (or at least the lack of enthusiasm) in the American political system for long range planning followed with hard-nosed execution. Thus, even though we will likely greatly improve our informational base we pretty well know in advance that because of our attitude toward planning we will never make full and effective use of this





information base. However, for a variety of reasons, I believe the prospects for long range, effective planning in the area of rural development are better than in most other major public policy areas.

Thirdly, a great deal of time and energy are going to be consumed in a dispute over which Federal agencies should have primary jurisdiction for administering the rural development programs. The jurisdictional problem is common to the opening up of any new policy area. I believe it will be a particularly tough problem in this case.

As one surveys the executive branch one sees several agencies which obviously should be involved in rural development, but given the present organizational structure, no single agency obviously should be the controlling unit. I would anticipate that a rather significant administrative reorganization will be necessary to assure meaningful results.

In the closing portion of my remarks I want to reaffirm my conviction that the potential support for the rural development movement is broad and deep. We do not have to accept Jefferson's view of the cities as "cancers on the body politic", but most of us can agree with Major Lindsay's judgment that too often today, "Our cities exact too much from those who live in them. They are not only increasingly expensive places in which to live or work; more and more, the price of city living is being paid by a sacrifice of fundamental personal freedoms".\*

The city, or at least the megalopolis, has become economically inefficient and and socially destructive. The city can be the flower of man's accomplishments. It can also be the mark of his failure. The signs of failure are numerous today. And they will multiply unless bold, corrective action is taken.

Too often today the city dehumanizes rather than humanizes. Too often today the city brutalizes rather than civilizes.

It is from this growing recognition that the rural development movement derives much of its strength, a strength reinforced by an old and still powerful strain in American thought that the small town is sociologically superior to the large city.

Thus I believe we have the opportunity during the next decade or so to undertake a great reordering of our public policies in a way that will profoundly influence the economic and social structure of this nation for generations to come. Whether or not we seize this opportunity will depend upon our vision and skill.

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\* "The Future of the American City", Saturday Review, January 8, 1966.





Finally, as this is an agricultural outlook conference, I think a word about agriculture is not entirely inappropriate. Some individuals and groups have embraced the notion of bringing new jobs into rural communities with particular enthusiasm because this dovetails with their argument that the exodus from the farm needs to be greatly accelerated. The greater availability of jobs in the smaller towns and cities would serve to lure more farmers from the land, with the transition being less painful than at present.

I agree that the expansion of job opportunities in rural areas can have some genuine benefits for farmers. However, I think it would be regrettable should the rural development effort come to be seen as reducing the necessity for maintaining a vigorous and effective family farm policy. The family farm is not only a valuable social institution, it is also the economic base on which thousands of our smaller towns rest. Seeking to maintain a viable family farm system should, indeed, be a key element of the rural development movement.













